THE EFFECT OF SEX ROLE ORIENTATION AND TRAINING ON LEADERSHIP STYLE

BY

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A man named Nasrudin was searching for something on the ground. A friend came by and asked, What have you lost, Nasrudin?

My key, said Nasrudin.

So the friend went down on his knees, too, and they both looked for it. After a time, the friend asked, Where exactly did you drop it?

In my house, answered Nasrudin.

Then why are you looking here, Nasrudin?

There is more light here than inside my house, he answered.

Middle East Folklore (Mintzberg, 1979a).

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THE EFFECT OF SEX ROLE ORIENTATION AND TRAINING ON LEADERSHIP STYLE

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This study examined the effect of sex role orientation and training on leadership style. The Bem Sex Role Inventory was administered to 405 undergraduate students to determine their sex role orientation (Feminine, Masculine, or Androgynous). Subjects selected to be group leaders were Feminine females, Masculine males, Androgynous females, and Androgynous males. All other subjects participated as group members in 81 five-person groups (a leader, two males, and two females). All subjects elected to participate as one option in fulfilling a course requirement. Prior to the experimental task half of the sex-typed leaders (Feminine females and Masculine males) participated in leadership training designed to increase the task-oriented leadership style of Feminine females and the socioemotional leadership style of Masculine males. The three hour training consisted of didactic presentation, modeling, and experiential learning, drawing upon a managerial grid model of training. The experimental task in which all subjects participated required brainstorming and decision-making skills to develop a 10-step systematic desensitization hierarchy. The leader was held responsible for optimal group participation and task completion. Following the task all subjects completed two group questionnaires to assess perceptions of group task success and socioemotional relations. In addition, group members completed a leader questionnaire assessing the task-oriented and socioemotional leadership style of the leader. Results indicated that untrained sex-typed leaders were not perceived according to sex role stereotypes. No differences were found between Androgynous and untrained sex-typed leaders. However, trained leaders were perceived to be higher than untrained leaders on almost all task-oriented and socioemotional measures of leadership style and group success. Trained Masculine male leaders in particular were rated significantly higher on task-oriented and socioemotional measures than Androgynous or untrained Masculine male leaders. Few differences existed between trained or untrained Feminine female leaders and Androgynous female leaders. Implications were drawn for the use of training to enhance leadership skills.

CHAPTER I
INTRODUCTION

The present study had three goals. The first was to investigate differences in leadership style due to the sex role orientation (Feminine, Masculine, or Androgynous) of the leader. The second goal was to study the influence of training upon sex-typed leaders (Masculine males and Feminine females). The third was to compare the leadership styles of sex-typed leaders, both trained and untrained, and untrained Androgynous leaders to determine if androgyny is the best model of leadership.

The literature review begins with an overview of the leadership research and shows the evolution of the study of sex differences in leadership. Some trait leadership studies have reported that females were perceived to be less dominant, competitive, and confident than males (Maier, 1970; Deaux & Taynor, 1973; Frank & Katcher, 1977). Other research has indicated that females were perceived to differ from males in leadership style. Females were perceived to use a consideration style of leadership while males used a task-oriented style (Bond & Vinacke, 1961; Petty & Lee, 1975; Bartol & Butterfield, 1976; Petty & Miles, 1976; Piliavin & Martin, 1978; Baird & Bradley, 1979). However, a growing number of trait and style of leadership studies have not found perceived sex differences (Day & Stogdill, 1972; Martin, 1972; Miner, 1974; Wexley & Hunt, 1974; Bartol & Wortman, 1975; Chapman & Luthans, 1975; Eskilson & Wiley, 1976; Lockheed & Hall, 1976; Osborn & Vicars, 1976; Petty, Odewahn, Bruning, & Thomason, 1977; Klein, 1979). Differences that were found occurred more frequently in laboratory situations suggesting that on-the-job experience with female leaders may moderate perceived differences (Bartol & Wortman, 1975; Bartol & Wortman, 1976; Deaux, 1976; Butterfield & Bartol, 1977; Petty et al., 1977).

Past research attempted to identify leader characteristics and behaviors. The unavailability of women in such roles was the primary reason for the concentration on male leadership qualities. The research which did include females indicated that few substantive differences existed. Yet the U.S. Department of Labor reports have illustrated that women have been underrepresented in management (U.S. Department of Labor, 1978). Most women occupy first-level managerial positions rather than middle and upper level positions (Baron, 1977; Patterson, 1975). Men outnumber women 20 to 1 in management, but the ratio of male to female corporate executives is 600 to 1 (Myer, 1975). Although 42% of the work force has been female, women make up less than 5% of middle management and only 1% of upper management (McLane, 1980; White, De Sanctis, & Crino, 1981).

Impediments to women's progress in the field appear more psychological than factual. Through socialization people develop culturally determined expectations of appropriate sex-role behavior (McClelland, 1965; Terborg, 1977). Sex role stereotyping has been considered a screen which alters the perceptions people have of male and female behavior (Rosenkrantz, Vogel, Bee, Broverman, & Broverman, 1968; Broverman, Vogel, Broverman, Clarkson, & Rosenkrantz, 1972, Bem, 1974). In sum, males are perceived to be more competent, aggressive, decisive, and leaderlike. Females are perceived to be more fragile, sensitive, emotional, and submissive. With such perceptions in mind, it is no wonder that leadership has been viewed as a male role. Hennig and Jardim (1977) point out that management is a male-dominated career with rules and traditions compatible with male behavior, such as those developed through team sports. Females were seen to behave contrary to those traditions. They were less likely to be accepted or able to socialize similarly with their coworkers once admitted (i.e., attend the same clubs, go out for a drink after work, use the same informal language, etc.).

Females were not expected to fill leadership positions and were evaluated negatively in leadership role because they were acting contrary to sex role expectations. Such perceptions have been pervasive. Women have been viewed as poor prospects for managerial positions because they lacked a career orientation, had poor leadership potential, and were undependable and emotionally less stable (Bass, Krussell, & Alexander, 1971). When asked if females would be capable in a leadership situation, more than 50% of respondents claimed females were temperamentally unfit for management and would be inferior to a male in supervisory positions (Gilmer, 1961; Bowman, Worthy, & Greyser, 1965; Bass et al., 1971; Haccoun, Haccoun, & Sallay, 1978). Females were not expected to exhibit the behaviors appropriate for organizational leadership (Bartol & Wortman, 1979). People generally expected the leader role to be filled by a man and would have objected to working for a female supervisor (Bartol & Wortman, 1979; Inderlied & Powell, 1979). Touhey (1974) found that the prestige and desirability of an occupation depreciated if people were informed that the proportion of females was increasing in that field.

While women have not been found to be less motivated to manage (Miner, 1974; Morrison & Sebald, 1974; Terborg, 1977) they continued to be expected to take subordinate roles (O'Leary, 1974; Schein, 1973, 1975) and were discriminated against for selection and promotion (Rosen & Jerdee, 1973, 1974a, 1974b). The reasons given were the greater rates of absenteeism, turnover, and lack of geographical mobility reported for females (Robie, 1973). Women were counseled into making less leader-oriented career decisions (Weisman, Morlock, Sack, & Levine, 1976) and given less opportunities to be on management teams (Hennig & Jardim, 1977).

However, there have been indications of change. The increased publicity of the women's movement, recent legislation prohibiting sex discrimination in employment, and the development of Equal Opportunity Affirmative Action Programs have prompted more women to pursue leadership roles. Cultural changes, such as smaller families, increased educational opportunities, greater life expectancy, and a higher divorce rate, have also been suggested as factors supporting and encouraging women to seek careers which involve promotions and a greater likelihood of someday holding a leadership position.

In 1962 54% of respondents in a survey believed that only men should occupy leadership positions, but in 1977 only 25% of respondents held similar beliefs (Kravetz, 1976; Tavris, 1977; Thornton & Freedman, 1979). By 1980 8% of the members of the United States armed forces were females, greater than any other country, with a female appointed to a commanding general position. Several universities have reported that the enrollment of women in MBA programs has tripled since 1971 (Chambers, 1974; Werner, 1979). In addition, several studies have failed to confirm sex differences and negative sex role stereotyping. Two studies indicated there were no differences between ideal leader characteristics and those possessed by male and female leaders (Denmark & Diggory, 1966; Veiga & Yanouza, 1978). Several attempts (Suchner, 1979; White & De Sanctis, 1979) have failed to replicate Touhey's (1974) finding that an occupation was viewed less positively when the percentage of females in those fields was increasing. Current opinion holds that perceived differences in leadership styles between males and females will diminish as women increasingly occupy leadership roles (Ezell, Odewahn, & Sherman, 1980; Bass, 1981; Sargent, 1981). Recent theories of leadership suggest that both masculine and feminine styles have skills to offer for effective leadership (Boettinger, 1979; Kanter, 1977; Mintzberg, 1979b; Pascale, 1979; Zaleznick, 1979; Sargent, 1981). Masculinity has been associated with task achievement while femininity has been associated with interpersonal relations. The Harvard Business School has taken the position that leadership needs to be both task- and human-oriented and that the presence of women will provide the impetus to incorporate the needed human-relations skills (Harvard Business Review, 1979).

There were some indications that females in leadership positions did behave differently from male leaders (Megargee, 1969). For instance, females judged to be high in dominance assumed the leadership role a majority of the time in same-sex pairs, but deferred to the male in mixed-sex pairs even though the male was judged to be low in dominance. Male leaders did not differ in their leadership in homogenous or mixed-sex groups. Bem (1974) indicated that people internalize sex role standards and attempt to maintain a consistency between their sex role expectations and their behavior. If a female believed leadership to be more appropriate for a male, she would inhibit her own leadership qualities when a male was available. However, Bem believed that individuals varied in how much of the traditional sex role stereotypes they adopted; i.e. they varied in the degree they felt that masculine and feminine traits were descriptive of themselves. The more an individual described him/herself in terms of both masculine and feminine traits, the more flexible his/her behavior was expected to be. Theorists hypothesized that sex role orientation may be a more appropriate tool than gender with which to examine sex-related differences in leadership. If a training program could be designed to increase a Masculine male individual's orientation toward interpersonal relations and increase a Feminine female individual's orientation toward task achievement, then they would theoretically become more effective leaders. Studies have indicated that females' sex-typing behavior was amenable to change (Thune, Manderscheid, & Silbergeld, 1980) providing further rationale that women can become competent and acceptable leadership candidates. An attempt will be made in this study to determine the plausibility of sex-typed behavior change. Can sex-typed females' and males' be trained to perform cross-sexed behaviors effectively?

The concept of androgyny assumes that an individual incorporates high levels of both masculine and feminine behaviors. Thus, an Androgynous leader should possess the ability to perform task-oriented behaviors to a similar degree as Masculine male leaders and socioemotional behaviors to a similar degree as Feminine female leaders. It is assumed that both trained sex-typed and untrained Androgynous leaders will be perceived to demonstrate high levels of socioemotional and task-oriented leader behaviors.

CHAPTER II
LITERATURE REVIEW

History of Leadership Studies

It is beyond the scope of this section to do a comprehensive review of leadership. Stogdill (1974) and Bass (1981) in their voluminous sourcebooks on leadership offer a more fruitful reference for those interested. In these volumes over 3000 studies on leadership were reviewed, observing an evolution in leadership research. The early belief was that a leader was born great; he inherited his leadership qualities. Then army psychologists in World War I were given the responsibility of developing selection and classification tests to quicken the pace under which leaders could be selected and fostered. There followed five decades of research that attempted to identify the distinguishing characteristics of leaders. Stogdill (1974) ignored all traits that were not investigated by at least three authors and still emerged with over 40 distinguishing traits. In the literature from 1900 to 1970, he identified over 22 traits that were supported by more than ten studies. The top ranking characteristics were intelligence, scholastic ability, sociability, dominance, self-confidence, responsibility, socioeconomic status, initiative, social participation, and energy.

In 1945 Shartle (1950) organized the Ohio State Leadership Studies to address the inefficiency of the trait theory approach to leadership. Complaints were rapidly accruing that there was little success in selecting leaders using an identified trait, there were too many supported traits to use in selection, and traits were of little utility in predicting how a leader would behave in various situations (Bird, 1940; Jenkins, 1947; Stogdill, 1948). This lack of diagnostic or predictive significance, accompanied by the introduction of factor analysis as a tool to condense defining traits and behaviors into related clusters, marked the transition from studying what a leader is (traits) to how a leader behaves (styles).

The style of leadership theories attempted to dichotomize leader styles into work-related and person-related behaviors. While they labeled the two styles with a variety of concepts (autocratic vs. democratic, initiating structure vs. considerate, production-oriented vs. employee-oriented, goal achievement-oriented vs. group maintenance-oriented, task-oriented vs. interaction-oriented) correlations were high among the work-related concepts and also high among the person-related concepts. That is, the same leaders who were described as concerned with production (Blake & Mouton, 1964) were also described as initiators of structure (Fleishman, 1953), goal emphasizers (Bowers & Seashore, 1966), and task-oriented (Fiedler, 1967). The leaders who were described as concerned with people (Blake & Mouton, 1964) were also described as considerate (Fleishman, 1953), interaction facilitators (Bowers & Seashore, 1966), and relations-oriented (Fiedler, 1967).

What emerged were two basic styles of leadership. A task-focused leader was viewed as someone who initiated structure, provided information, determined what was to be done, and issued the rules. The follower-focused leader solicited advice, opinions, and information from followers and shared decision-making. The leader was either focused on changing the information and understanding of the subordinates, or on changing the motivation of the subordinates to work on the task. The style which was most effective was viewed to be dependent on the environment, the task, and the leader-follower interaction (Fiedler, 1967; Vroom & Yetton, 1974).

The Ohio State Leadership Studies were instrumental in identifying the Initiating Structure and Consideration styles of leadership. The Consideration style included leader behavior which attended to the comfort, well-being, status, and contributions of subordinates. The Initiating Structure style involved leader behavior which was directed at clarifying the work roles of the leader and subordinates, establishing ways to get the job done, such as initiating activity, organizing it, and defining ways to accomplish the task at hand.

The first questionnaire developed by the Ohio State studies to assess these factors was dubbed the Leader Behavior Description Questionnaire, and it included 40 items which differentiated Consideration (C) and Initiating Structure (IS) behavioral styles (Halpin & Winer, 1957; Hemphill & Coons, 1957). Subordinates in a variety of settings (military, academic departments, and industrial environments) provided their perceptions of their leader's behavior along with measures that were used to assess their degree of job satisfaction and productivity. The correlation of their perceptions of the leader's behavior with these measures produced the means by which leadership styles could be evaluated as effective.

Since that time, the original version of the questionnaire has been revised to include ten other factors although most research still focuses almost exclusively on the IS and C factors. The current questionnaire, called the LBDQ XII (Stogdill, 1963, 1974), includes ten items to assess IS and ten to assess C behaviors. Results of correlational studies using those two factors have indicated that Consideration has correlated most frequently with low absenteeism (Fleishman, 1957; Korman, 1966), fewer grievances (Fleishman & Harris, 1962; Korman, 1966), and greater job satisfaction (Halpin, 1954; House & Filley, 1971; Stogdill, 1974; Hoffman, 1974; Badin, 1974; Weed, Mitchell, & Moffitt, 1976). On the other hand, Initiating

Structure has been positively correlated most often with performance (Sheridan & Vredenburgh, 1979), and group productivity (Fleishman, 1957; Korman, 1966; Stogdill, 1974). Both IS and C have shown positive correlations with greater group cohesiveness (Hemphill & Coons, 1957; Greene & Schriesheim, 1980) and many studies have indicated that job satisfaction has correlated positively with both IS and C (Hoffman, 1974; House & Filley, 1971; Osborn & Hunt, 1975).

Those studies helped to determine how IS and C differentially affected working situations, but it became increasingly apparent that perhaps a combined style of leadership which was high in both IS and C would be the most effective type of leadership in the majority of situations (Stogdill, 1974; Bass, 1981). Schriesheim and Murphy (1976) found that certain combinations of IS and C (i.e., high in one, low in the other) were found to be dysfunctional.

What cannot be ignored is that several contingencies have been found to moderate the desirability of the leader being high in IS or C. For example, Fleishman and Harris (1962) found that too much Initiating Structure was associated with more grievances, absenteeism, and turnover in long term work situations. It has also been found that high ratings of leader IS were not helpful in highly structured tasks (Badin, 1974). However, Bass (1965) found that a certain amount of IS was optimal for effective supervision when workers were untrained or lacking in group cohesiveness.

Evidence has also shown that certain contingencies interact with the leader's Consideration style of leadership. Leaders who demonstrated behaviors that were evaluated to be high in Consideration were evaluated as more desirable in small groups (Hemphill, 1950; Badin, 1974; Schriesheim & Murphy, 1976; Greene & Schriesheim, 1980), in all task conditions (Badin, 1974), and in low stress situations (Fleishman, Harris, & Burtt, 1955; Schriesheim & Murphy, 1976).

Sex Differences in Leadership Studies

Review of the past research will illuminate the effects of sex role stereotyping on evaluations of women in leadership, the perceived trait and style differences between male and female leaders, and the impact of sex role orientation.

Sex Role Stereotypes and Their Impact on Leadership

For several decades the study of leadership was largely based on research with men, seldom with women, and rarely with both. Leadership was viewed as a masculine concept. Efforts during the first half of the century identified leadership traits which were really descriptions of male leaders. As the interest in studying female leadership grew, the first route of study explored whether female leaders possessed those same characteristics. While this route employed an erroneous assumption (i.e., that those traits judged to be significantly related to leadership were indeed the same traits that would have emerged if both males and females had been examined simultaneously from the start), it served as the basis for early sex difference research.

In support of this approach, however, there was a body of research that investigated the traits judged to be desirable in an ideal leader. Brown (1979) did a thorough comparison of the trait studies that compared male and female leaders. Overall Brown found research results to be contradictory and inconclusive. However, a majority of the studies showed that females lacked leadership characteristics which male leaders possessed. These masculine traits were found to be more compatible with the characteristics described of an ideal leader (McClelland, 1965; Powell & Butterfield, 1979; O'Leary, 1974; Schein, 1973, 1975). Ideal leaders were assessed to be task-oriented, responsible, aggressive, decisive, objective, direct, and emotionally stable.

Subjects of both sexes tended to see women as different from men in important managerial characteristics. Schein (1973), who studied the responses of male managers, obtained descriptions of successful managers which were more similar to descriptions of men (on 60 out of 86 compared items) than of women (similar on only 8 out of the 86 items). This was replicated with female managers (Schein, 1975), and with managers of both sexes (Massengill & DiMarco, 1979). Additionally, two studies reported that women as a group described themselves as different from or even opposite to men on presumed requisite management traits (McClelland, 1965; O'Leary, 1974). These studies supported the beliefs that men possessed and women lacked the attributes and abilities found to be ideal for effective leadership.

Brenner and Bromer (1981) found that male and female managers prefer male stereotypic leader behaviors more than female stereotypic behaviors. They coined the equation "think manager = think male." Others (Powell & Butterfield, 1979; Schein, 1973, 1975) have hypothesized that a close association existed between the perceptions of requisite management characteristics and the sex role stereotypes of masculinity versus femininity which have been found in sex role stereotype research (Rosenkrantz et al., 1968; Broverman et al., 1972; Bem, 1974). While stereotypes have provided a superficial classification system, through which individuals organize and package their observations of human behavior, they have not been supported in research which has examined actual sex differences. The only actual differences between the sexes which have been consistently supported have been that males have greater mathematical and visuo-spatial abilities, males have been reported to be more aggressive, and females demonstrate greater verbal skills (Maccoby & Jacklin, 1974). Self-confidence was the only achievement-related characteristic that consistently differentiated the sexes (Maccoby & Jacklin, 1974). Despite these findings, stereotypical beliefs have not been quick to change, and they have continued to affect perceptions of sex differences in leadership studies.

What sex role stereotype research has illuminated is a double standard in the perception of males versus females. The literature from 1939 to 1959, reviewed by Rosenkrantz et al. (1968), indicated that people ascribed greater social value to masculine over feminine behaviors. Masculine characteristics were found to be more socially desirable, but females who incorporated these characteristics into their self-concept and acted in more masculine ways have not been considered to be normally adjusted (Broverman, Broverman, Clarkson, Rosenkrantz, & Vogel, 1970). This conclusion was based on the hallmark study by Broverman et al. (1970) in which three sets of clinicians described a healthy, mature, socially competent person. One group was told the person was an adult woman, a second group was told the person was an adult man, and the third group was told it was an adult without reference to sex. When compared, the results indicated great similarity in the descriptions given of the healthy adult man and the healthy adult sex unspecified. There was little similarity between the healthy adult and the healthy adult woman. In contrast to the characteristics used to describe the healthy adult and adult male, the adult females were characterized by dependency, passivity, fragility, nonaggressiveness, noncompetiveness, yielding behavior, and inability to take risks. None of these characteristics have been found to be associated with leadership role behavior. Items of competence characterized the male stereotype which was more compatible with requisite leadership qualities. The double standard in sex role stereotyping indicated women were not well suited for the role of leader yet if a woman changed her behavior to match ideal leadership characteristics she would be considered to be acting outside of appropriate role behavior and thus not well adjusted.

With such positive attributions characterizing the male stereotype, it follows logically that males would be evaluated more positively than females based on the salience of their sex and the stereotyped behavior expected of that sex. Such support for this logic has been demonstrated. The knowledge of sex has repeatedly been found to affect perceptions of a similarly described act or performance (Goldberg, 1968; Hollander & Julian, 1969; Fidell, 1970; Pheterson, Kiesler, & Goldberg, 1971; Cecil, Paul, & Olins, 1973; Deaux & Emswiller, 1974; Hamner, Kim, Baird, & Bigoness, 1974; Touhey, 1974; Dipboye, Fromkin, & Wiback, 1975; Deaux, 1976; Gross & Geffner, 1980; Etaugh & Kasley, 1981). In these studies subjects were requested, for example, to evaluate the performance of an author or a painter. Half of the subjects were told it was a female while the other half were told it was a male. The results indicated that both female and male subjects devalued the product if they believed it was created by a woman. The only exception was that if the product was already judged to have been successful, then the subjects evaluating the female product judged it more positively than those evaluating the male product (Pheterson et al., 1971). This finding suggested that people rate the performance of females more positively when the performance surpasses expectations implying that females have not been expected to succeed.

In conclusion, sex role stereotypes have affected women's efforts to be accepted in leadership roles. Women have not been found to possess the ideal leadership characteristics, they have been expected to remain within appropriate sex role behaviors to be considered healthy and adjusted (thereby excluding leadership which is a male appropriate behavior), and they have had their performances evaluated more negatively than males. These stereotypes seem to perpetuate a male managerial model which excludes women.

Sex Differences in Leadership Traits

While there has been frequent support for differences in aggressive behavior between males and females (McIntyre, 1972; Smith & Connolly, 1972; Maccoby & Jacklin, 1974), there has been less evidence for other sex-related trait differences. Only one or two studies have indicated support for differences on particular traits. Females have been reported to be less confident (Maier, 1970; Sashkin & Maier, 1971), less dominant (Frank & Katcher, 1977; Adams & Landers, 1978), and less competent (Deaux & Taynor, 1973). When compared to men on similar criteria, women receive less favorable leader evaluations than men (Rosen & Jerdee, 1973; Bartol & Butterfield, 1976; Deaux, 1976; Osborn & Vicars, 1976). Yet a further distinction must be made. Are these less favorable evaluations which are based on impressions, and likely to be affected by sex role stereotyped beliefs, similar to the results obtained when making objective behavioral observations? Based on the studies that examined actual differences in behavior, there was little support for differences in male and female behavior (Day & Stogdill, 1972; Martin, 1972; Bartol, 1973; Jacobsen & Effertz, 1974; Rousell, 1974; Petty et al., 1977; Wexley & Hunt, 1981).

An interesting difference in observed behavior was reported by Megargee (1969). His study indicated that females may have the necessary decision-making skills for leadership but they do not favor the overt role of leadership when a male is available. Megargee selected high and low dominant males and females to participate in a leadership study. Over 30 previous studies had supported that dominance was positively correlated with leadership

(Stogdill, 1974). Megargee paired a high dominant (Hi Do) person with a low dominant (Low Do) person, and instructed them to choose who would be leader and who would be follower. He then recorded the frequency of the Hi Do person assuming the leadership role. He varied the sex compostion of the Hi Do - Low Do pairs (both males, both females, Hi Do female with Low Do male, and Hi Do male with Low Do female). His results indicated that in three of the paired variations, the Hi Do person assumed the leadership role, as predicted, 70-90% of the time. However, the Hi Do female - Low Do male pair was an exception. The Hi Do female asumed the leadership role only 20% of the time.

Megargee's conclusion at that point was that dominance was not a good predictor of female leadership in mixed-sexed situations. He then analyzed the decision-making process to see who made the final decision of who was to be the leader. In three pairs, the Hi Do persons made the decision in 38-56% of the cases, appointing themselves 67-88% of the time. In the Hi Do female -Low Do male pair, the female made the decision a majority of time (69%), but appointed herself only 9% of the time. Thus, Hi Do females demonstrated decision-making abilities but opted for the role of follower when a male was available. Megargee hypothesized that sex role stereotypes which suggest males are more fit for leadership accounted for the females' reluctance to assume the leader role when a male was present, but in observed behavior, the females possessed similar decision-making abilities.

Other studies which have found differences in behaviors demonstrated by male and female leaders concluded that females have abilities which are well suited for leadership situations. Females have been found to be more attentive to social stimuli, more accurate interpreters and responders to that input, and more interpersonally sensitive (Wine, Moses, & Smye, 1980). While males have greater competencies in visuospatial and mathematical areas (Maccoby & Jacklin, 1974), these are noninterpersonal competencies, and thus less well suited for management of people. Females' competencies were in interpersonal-related areas, with results indicating females have greater verbal abilities (Maccoby & Jacklin, 1974), look more at subordinates (Exline, 1972; Argyle & Cook, 1976), listen more (Argyle, Lalljee, & Cook, 1968; Zimmerman & West, 1975; Markel, Long, & Saine, 1976; Weitz, 1978), more accurately judge emotional messages (Buck, Savin, Miller, & Caul, 1972; Buck, Miller, & Caul, 1974; Rosenthal, Archer, DiMatteo, Kiovumaki, & Rogers, 1974; Zuckerman, Lipets, Kiovumaki, & Rosenthal, 1975), are more rewarding (Argyle, 1969), and are more able to learn in social contexts (Lynn, 1972) than males. Thus, females' greater social competencies could actually produce more favorable evaluations of women in leadership if these qualities were considered ideal and necessary leadership characteristics.

Sex Differences in Styles of Leadership

The differences perceived in styles of leadership, or the differences in the pattern of behaviors employed by a leader, focused particularly on differences between the styles of Initiating Structure (IS) and Consideration (C). As far back as 1955 females were found to demonstrate more consideration behaviors while males were found to demonstrate more task-oriented behaviors (Parsons, 1955). Measures of group success were expected to show that female leaders achieved more interpersonal success while male leaders achieved more task success. There has been support for differences between male and females on certain behaviors. However, there has been less support for differences between opposite sex leaders in studies which compared styles of leadership and not just particular behaviors.

In a few studies, female leaders were found to demonstrate more accommodative behavior (Bond & Vinacke, 1961; Denmark & Diggory, 1966; Chapman, 1975) and more self-disclosing behavior (Aries, 1976) than male leaders. Male leaders were found to demonstrate more directive behavior (Baird & Bradley, 1979), more exploitative behavior (Bond & Vinacke, 1961), and more motivation (Helmich, 1974) than female leaders. These results suggested that certain behaviors pointed up the differences between opposite sex leaders, but their general style of leadership did not differ (Chapman, 1975; Aries, 1976). In fact Helmich (1974) found that managers perceived male leader behavior to be more motivated while their female counterparts were perceived to be more task-oriented.

Only seven out of 31 studes indicated significant differences between male and female leadership styles in the expected stereotyped direction, and most of the differences were perceived by students rather than actual managers. Female leaders scored high on Consideration behaviors and men scored high on Initiating Structure in four studies (Bartol & Butterfield, 1976; Petty & Miles, 1976; Piliavin & Martin, 1978; Baird & Bradley, 1979). Petty and Lee (1975) reported females scored high on Consideration scores but males did not differ from females on Initiating Structure. Inderlied and Powell (1979) found the opposite: males scored high on Initiating Structure, particularly Masculine males, but Feminine females did not demonstrate greater Consideration behaviors. In a similar vein, Hollander and Yoder (1980) reported males demonstrated greater instrumental behaviors, but both males and females demonstrated high levels of expressive behaviors.

There were a few studies that supported differences contrary to sex-stereotyped expectations. Four studies indicated female leaders demonstrated a greater task-orientation than male leaders (Helmich, 1974; Eskilson & Wiley, 1976; Butterfield & Bartol, 1977; Lee & Alvares, 1977). In one study (Butterfield & Bartol, 1977), males were also perceived to demonstrate greater Consideration behaviors. Both male and female leaders in that study were perceived to perform opposite to sex role expectations. Lee and Alvares (1977) trained leaders to exhibit high levels of Initiating Structure. They found that subjects rated similar behavior higher for female leaders than for male leaders. Were female evaluations inflated when they surpassed expectations? While these researchers noted the differences in IS scores, both leaders had scored highly in IS. Thus the authors concluded overall that there were no overall sex differences in the leader descriptions.

All other investigations of sex differences in style of leadership proved negative whether using students or managers (Day & Stogdill, 1972; Martin, 1972; Miner, 1974; Price, 1974; Rousell, 1974; Wexley & Hunt, 1974; Chapman, 1975; Bartol & Wortman, 1976; Bedeian, Armenakis, & Kemp, 1976; Lockheed & Hall, 1976; Osborn & Vicars, 1976; Butterfield & Powell, 1977; Lee & Alvares, 1977; Petty et al., 1977; Petty & Bruning, 1980). It will be noted that students have frequently reported sex differences when managers have not (Bowman et al., 1965; Deaux, 1976; Brown, 1979) indicating that on-the-job experience may mediate sex role stereotyping.

In review, style of leadership appears to be more a matter of individual differences than sex differences (Day &

Stogdill, 1972; Bartol, 1974; Bartol & Wortman, 1979). Denmark (1977) concluded that

> Many of the assumptions that women managers are basically different from men are just not supported by data. The one difference investigators generally agree upon is women's greater concern for relationships among people; this should be considered a plus in terms of leadership effectiveness. Alleged sex differences in ability, attitudes, and personality have been based on sex-role stereotypes, rather than empirical observations of women leaders (pp. 110-111).

Bartol (1974) believed there were factors other than sex which determined leadership behavior. Inderlied and Powell (1979) attempted to address this issue. Their belief was that differences in leadership styles were not a function of gender but a result of individuals holding different sex role identities which may be correlated with, but not determined by gender. Orlofsky and Stake (1981) found that sex role orientation was a better predictor of achievement and interpersonal behavior than was gender. The impact of sex role orientation in determining differences in leadership style appeared to be a valid approach to investigating leadership behavior.

The Impact of Sex Role Orientation

Description of Sex-typing.

Sex role stereotypes imply there are certain standard behaviors which are appropriate for females and others for males. Thus each sex inhibits those behaviors judged more appropriate for the opposite sex. The degree to which individuals adopt the sex role stereotypes judged appropriate for their gender has been called sex-typing. Bem's theory is that sex-typed individuals possess an internalized sex role standard and are motivated to maintain a consistency between their behavior and that standard (Bem, 1974). This would cause them to suppress behaviors that violate their internalized sex role standard. Not all people were viewed as sex-typed to a similar degree, accounting for variations in the expression of the sex role stereotype prescriptions. This led to the development of measures to better define and tap those sex-typing variations (Bem, 1974; Spence, Helmreich, & Stapp, 1975; Heilbrun, 1976).

Bem (1974) developed a 60-item measure to assess an individual's acceptance of feminine and masculine traits as self-descriptive. This measure was used in the current study and will be addressed more explicitly in the Methods Section. In general, the questionnaire has helped to define and to assess the degree to which a person was sex-typed. Revisions of the questionnaire and contributions by other researchers in this area (Spence et al., 1975) have led to the generation of four sex role classifications. A person was labeled as Feminine (endorsed the feminine traits as being more self descriptive), Masculine (endorsed the masculine traits as being more self descriptive), Androgynous (endorsed both feminine and masculine traits to a similarly high degree), and Undifferentiated (endorsed feminine and masculine traits to a similary low degree). As can be seen, Masculinity and Femininity were considered to be two separate dimensions that could vary independently allowing for varying preferences of the masculine and feminine traits.

It was Bem's belief that sex-typed individuals (Masculine males or Feminine females) would be more restricted in their behaviors suppressing those behaviors that did not seem appropriate to their sex-typing. Androgynous individuals, on the other hand, would have greater behavioral flexibility since both masculine and feminine tasks would seem appropriate and consonant with their endorsed self concept.

Differences in Behavior Due to Sex-typing. In several studies investigating the behaviors of sex-typed subjects, Masculine individuals were less likely to express nurturing behavior (Bem & Lenney, 1976; Bem, Martyna, & Watson, 1976) and were more conservative in their behavior (Spence et al., 1975). Feminine individuals conformed more (Bem, 1975; Brehony & Geller, 1981) and were less dominant (Klein & Willerman, 1979). Androgynous subjects, in contrast, were able to express nurturing behavior as well as less conformity and more independence when performing masculine or feminine tasks regardless of their gender (Bem, 1975; Spence et al., 1975; Bem & Lenney, 1976; Bem, Martyna, & Watson, 1976; O'Conner, Mann, & Bardwick, 1978; Silvern & Ryan, 1979; Campbell, Steffen, & Langmeyer, 1981).

In general, Feminine subjects expressed lower self-esteem and Androgynous subjects expressed the most self-esteem (Orlofsky, 1977; Hinrichsen, Follansbee, Ganellen, 1980; Holleran, Staszkiewicz, & Lopez, 1983). In addition, Androgynous individuals were described as lower in expressions of anxiety, depression, or emotional distress, more effective, more sociable, less inhibited, and more adjusted (Bem, 1975; Spence et al., 1975; Bem & Lenney, 1976; Bem et al., 1976; Orlofsky, 1977; Ickes & Barnes, 1978; O'Conner et al., 1978; Bem, 1979; Flaherty & Dusek, 1980; Spence & Helmreich, 1980; Kelly, O'Brien, & Hosford, 1981; Major, Carnevale, & Deaux, 1981).

While considerable support was provided for the advantages of being Androgynous rather than sex-typed, criticism was aimed at the idea that androgyny was more preferable to masculinity (Jones, Chernovetz, & Hansson, 1978; Worell, 1978; Silvern & Ryan, 1979; Bernard, 1980). This position was based on several points. Multiple studies demonstrated no differences between Androgynous males and Masculine males (Silvern & Ryan, 1979; Bernard, 1980; Flaherty & Dusek, 1980), and other studies have indicated that Masculine males were more adjusted than Androgynous males (Deutsch & Gilbert, 1976; Jones et al., 1978; Silvern & Ryan, 1979; Campbell et al. 1981). Additionally, males who have endorsed lower degrees of masculine traits have been reported as having more adjustment problems than males with higher levels of endorsement (Jones et al., 1978). Females, on the other hand, saw masculine traits as more desirable, expressed a desire to be more masculine, and were reported to be more adaptive, competent, and secure with greater endorsements of masculine items (Spence et al., 1975; Bem, 1977; Jones et al., 1978; Pedhazur & Tetenbaum, 1979). These studies indicated that flexibility and adjustment tended to be associated with masculinity rather than androgyny.

In sum, androgyny has not been fully supported as the desired sex role orientation. There have been strong arguments that the endorsement of masculine traits would be preferable. However, studies have indicated a need to integrate both masculine- and feminine-typed skills particularly for interpersonal situations (Harvard Business Review, 1979). For this reason Androgynous individuals would be preferred to Masculine individuals for leadership roles which rely strongly on communication and interaction skills. Support has been found that Androgynous males were better able to be both instrumental and expressive than Masculine males (Kelly, O'Brien, Hosford, & Kinsinger, 1976; Flaherty & Dusek, 1980; Campbell et al., 1981; Kelly et al., 1981).

Sex-typing and Leadership

Masculinity has been associated with an instrumental orientation (getting the job done) while femininity has been associated with an expressive orientation (concern for the welfare of others and the harmony of the group) (Bem, 1974; Orlofsky, 1977; Kelly & Worell, 1977; Waters, Waters, & Pincus, 1977; Worell, 1978). The literature has suggested that effective leaders would demonstrate high levels of both task-oriented behaviors (Initiating Structure style of leadership) and socioemotional behaviors (Consideration style of leadership). Sex-typed individuals have been found to be reluctant to engage in cross sex-typed behaviors while Androgynous individuals are willing to use whatever behavior was appropriate for the situation (Bem, 1975; Bem & Lenney, 1976; Bem et al., 1976). If high levels of Consideration and Initiating Structure are desired in leadership, then Androgynous leaders would be expected to demonstrate both behaviors to a high degree. Feminine individuals would need to develop skills aimed at accomplishing the task, to take more risks, and to promote decision-making, while Masculine individuals would need to develop greater communication skills, to express feelings, and to provide more support. An Androgynous person should theoretically be more prepared to do both types of behaviors without reluctance. It would be difficult to hypothesize what skills they would need to improve. This blend of leadership, a more androgynous concept of leadership which attends to affiliative needs as well as problem solving, has been conveyed in many leadership models (Blake & Mouton, 1964; McClelland, 1965; Hersey & Blanchard, 1977; Argyris, 1976) and has been supported in research indicating that Androgynous individuals were able to be both more instrumental and expressive than sex-typed individuals (Kelly et al., 1976; Campbell et al., 1981; Kelly et al., 1981). Androgyny has been increasingly referred to as the best model for leadership training (Lenney, 1979a, 1979b; Sargent, 1981).

Flaherty and Dusek (1980) reported that both Androgynous and Masculine subjects scored better on achievement and leadership measures than Feminine subjects. In this same study, Androgynous and Feminine subjects scored better on sociability than Masculine subjects. The authors used this finding to support Bem's Theory of Androgyny, that possessing high levels of both masculinity and femininity contributed to better achievement and sociability. An Androgynous person should also be better able to demonstrate the achievement and sociability skills required in leadership situations. Similar support was found in Major et al. (1981) and Orlofsky and Stake (1981) indicating Androgynous persons were as instrumental and expressive as Masculine and Feminine individuals respectively.

Inderlied and Powell (1979) concentrated on sex role orientation rather than gender to study the relationship between sex-typing and leader descriptions. Students and employees with varying degrees of managerial experience completed the Leadership Behavior Description Questionnaire (LBDQ, Stogdill, 1963) for a self and an ideal leader description, as well as the Bem Sex Role Inventory (BSRI, Bem, 1974) for a self and a good manager description. The results for both sexes indicated a positive relationship between self scores of Masculinity on the BSRI and ideal leader scores of Initiating Structure on the LBDQ, but there was no relationship between self scores of Femininity on the BSRI and ideal leader scores of Consideration on the LBDQ. In other words Masculine males and females preferred a leader high in Initiating Structure while Feminine males and females showed no preference for a leader high in Consideration. In addition, subjects registered a strong preference for masculine traits on the good manager BSRI description but stereotyped the ideal manager on the LBDQ as being high in both Consideration and Initiating Sructure.

This poses an issue. Must women act more like men and embody more masculine characteristics to become acceptable leader candidates? Some theorists believe women should conform to the male sterotype to be more consistent with existing male managers (Brenner, 1972; White, De Sanctis, & Crino, 1981) while other theorists believe there should be an integration of feminine behaviors into the existing male managerial model (Denmark, 1977; Orlofsky & Stake, 1981;

Sargent, 1981). The increasing opinion has been that stereotyped sex roles need to be rejected in order for advancements to be made in leadership (Terborg, 1977). Several studies have indicated that when females have acted in a more masculine way they were perceived less favorably (Feather & Simon, 1971; Zeldow, 1976; Haccoun et al., 1978). Other studies have indicated that women were perceived more favorably (Spence & Helmreich, 1980; Taynor & Deaux, 1973; Spence et al., 1975). Several studies have concluded that female managers were dissimilar to females in general and more similar to Masculine males (Bartol, 1978; Pferfer & Shapiro, 1978).

The position most often advocated in theoretical discussions about this issue holds that women should bring their human-relations orientation into the management world. They should not become like men, though they should incorporate the male-oriented instrumental skills proven to be effective for task completion. Men on the other hand should not remain static. They should incorporate the human-relations skills previously considered a female competency to achieve greater group productivity and job satisfaction (Harvard Business Review, 1979; Sargent, 1981; Garen, 1982).

Leadership Training

The infusion of managerialism with a masculine ethic accomplished task objectives but neglected the subordinate motivation and morale found to be critical for productivity, efficiency, and retention of employees (Zaleznik, 1979). Managers have been found to spend 30-55% of their time interacting with others not including their secretaries or phone contacts (Kanter, 1977). Mintzberg (1979b) reported that managers spent an even greater amount of their time, 80%, in verbal communication, making communication one of their central tasks. The desired communication skills include eliciting the opinions and ideas of others to increase subordinate commitment and involvement (Hunt, 1979), participative decision-making, relying on open-ended questions and consensus for conflict resolutions (Pascale, 1979), negotiation, information dissemination, and motivation of subordinates (Mintzberg, 1979b).

Leadership training should cover both task and socioemotional skills. Blake and Mouton (1964, 1978, 1980a, 1980b, 1982) developed a model of training, the Managerial Grid, that attends to both skills. A leader's concern for production is plotted on a horizontal axis of a grid and the concern for people on a vertical axis. The assumption is that these concerns are interdependent and could vary. Each axis of the grid was scaled from one to nine, with nine being high. Five basic managerial styles are described within this grid framework. A 1,1 style places low emphasis in both areas, resulting in an uninvolved and nonproductive form of leadership. A 1,9 style (1=concern for production and 9=concern for people) considers the attitudes and feelings of subordinates to be of utmost importance with little concern for getting the job done. The opposite 9,1 style considers production and efficient operation to be primary with little attention paid to the human elements. A 5,5 style is concerned to some extent with both production and people, but doesn't demonstrate the extent of the concern for both areas considered by the 9,9 style of leadership. The 9,9 style has been considered the leadership style which fosters respect, cooperation, and group participation as well as obtaining the best product possible. The descriptions of these styles are described more fully in Appendix D since this hand-out was provided during the leadership training of this study.

Training programs for the Managerial Grid have attempted to increase a leader's concern for both task and socioemotional factors. Similarly, training programs have emphasized the Ohio State Studies' dimensions of Consideration and Initiating Structure. Some studies suggested that training increased only the Consideration style (Oshry & Harrison, 1966; Biggs, Huneryager, & Delaney, 1966; Hand & Slocum, 1972) or only the Initiating Structure style (Beckhard, 1966; Schwartz, Stillwell, & Scanlon, 1968) while training has also been reported to increase both Consideration and Initiating Structure styles (Blake, Mouton, Barnes, & Greiner, 1964). Two studies indicated that Initiating Structure style decreased (Biggs et al., 1966; Carron, 1964) suggesting that trainees may have interpreted the training focus on Consideration behaviors as implying they should put less focus on task concerns. Lastly, some studies done in the early 1960's indicated no changes in leadership style as a result of training (Miles, 1965; Greiner, Leitch, & Barnes, 1968).

The techniques of training have also been studied. Lectures were viewed as least successful unless associated with discussion, roleplaying, behavioral modeling, or self-examination in sensitivity groups (Bradford & Lippitt, 1952; Levine & Butler, 1952; Blake & Mouton, 1969). A participative training format has most often been suggested (Bass, 1981; Blake & Mouton, 1982; Sinetar, 1981). Based on these findings, the training format selected for the training program in the current study used lecture, roleplaying, modeling, and participative feedback.

Several studies have focused training on sex differences, usually concentrating their efforts on training women. Women were considered as lacking in assertiveness, decision making skills, conflict resolution skills, and self confidence (White et al., 1981). However, Alpander and Guttman (1976) surveyed male and female managers and found that both sexes perceived similar training needs. The management model for the 1980's has been more likely to stress that both sexes need training, integrating feminine type skills into the leadership model (Sargent, 1981; Garen, 1982). Women have been shown to have competencies in communication, both written and oral, have been conceded to be more empathic, and have been considered to focus more on the human relationships in task situations. Incorporating these feminine traits has meant promoting a more participative model to achieve task objectives. This combination of socioemotional and task competencies has been labeled an androgynous model of leadership (Larwood & Wood, 1977; Sargent, 1981; Garen, 1982). Training focusing on sex role differences has been found to be effective in sensitizing trainees to sex role expectations (Gallessich, Gilbert, & Holahan, 1980) and in promoting changes in sex role behavior (Larwood, Wood, & Inderlied, 1978; Thune et al., 1980; Bennett & Grosser, 1981).

Experimental Contingencies That Affect Leadership Studies

Stogdill (1974) and Terborg (1977) have reviewed the area of leadership extensively. Both have indicated the need to specify the experimental conditions since many variables have been found to affect the perceptions of leaders and their group's performance. The contingencies most frequently considered have been group size, composition, task ambiguity, sex-typing of the experimental task, and performance cues regarding the success of the group's outcome.

The size of the group has been found to affect subordinates preferences for Initiating Structure or Consideration styles of leadership (Badin, 1974, Chapman & Luthans, 1975; Schriesheim & Murphy, 1976; Greene & Schriesheim, 1980). Consideration styles of leadership have been preferred in small group situations, while Initiating Structure has been found to be preferable in large groups. The time the group has spent together has been another factor to consider. Initiating Structure has been favored in newly formed groups. These contingencies suggest that both high Consideration and high Initiating Structure leader behaviors would be desired in the current task situation which used small, newly formed groups.

Another group variable has been the sex composition of the group. In mixed-sex groups males have been reported to display more leadership than females (Megargee, 1969; Aries, 1976). Other studies have indicated that in mixed-sex groups the female leaders acted more socioemotional while the males focused on task concerns (Parsons, 1955; Piliavin & Martin, 1978) indicating that mixed-sex group situations may increase the perceptions of the leader's sex role stereotyped behavior. A mixed-sex group composition was selected for the current study. It is expected to increase differences perceived in untrained sex-typed leaders. However, if training is effective, trained sex-typed leaders are expected to focus on both task and socioemotional concerns to the extent that no differences in perceived behavior will be found between female and male leaders.

The nature of the task has been found to affect leader and group evaluations. Decision-making tasks have been found to be more traditionally masculine while brainstorming tasks have been found to be more traditionally feminine (Jens, 1978). The task of this study appeared to require both brainstorming and decision-making skills helping to neutralize the advantage one sex may have had over the other in approaching the task.

Task ambiguity has been another frequently considered variable when examining leadership. The bulk of studies indicate that leadership emerged more quickly and was more often recognized in ambiguous situations (Maier, 1970; Pheterson et al., 1971; Kerr & Schriesheim, 1974; Downs & Pickett, 1977; Green & Nebeker, 1977; Borsig & Frey, 1979; Rice, Bender, & Vitters, 1980). Since time was limited in this study and rapid enhancement of the leadership was considered desirable, an ambiguous task was selected. An ambiguous task was also favored for this study to enhance sex role stereotyped behavior of untrained leaders. There has been support for the idea that ambiguous tasks lead to more sex role stereotyped behavior. Females have been reported to be more permissive and less dominant in ambiguous situations, and males have been reported to be more task-oriented (Maier, 1970). The task selected for this study was considered to be ambiguous, with some structured facets. It required that the group decide on ten steps for a systematic desensitization hierarchy, with each step becoming progressively more anxiety-producing. The requirement to establish ten steps imposed a structure into the task. However the range of creativity each group could manifest introduced an ambiguous element to the task. If ambiguous tasks do increase the sex-typed behavior of leaders, then trained leaders would have to demonstrate a significant training effect to be seen as significantly different from untrained leaders.

Lastly, several studies have found that information regarding the outcome of the task was a variable which affects leader perceptions (Mitchell, Larson, & Green, 1977; Rush, Thomas, & Lord, 1977; Lord, Binning, Rush, & Thomas, 1978). In the current study an attempt was made to minimize performance cues. Subjects were told they would not have time to complete their task. However, all groups were actually able to complete the task insuring each group some indication of task success. No information was provided about the success of their hierarchy until after completion of post-task questionnaires.

In sum, the task ambiguity and mixed-sex group composition were both expected to increase perceptions of traditional sex role stereotyped behavior of the leaders. Neither males nor females were expected to have an advantage due to the sex-typing of the task or the perceived success of their task, and their leadership status was expected to be enhanced quickly. Both Consideration and Initiating Structure behaviors were expected to be desirable in this situation, making it preferable for the leader to demonstrate both styles of leadership.

Goals of the Study

Based on the literature discussed in this section, the final objectives of the current study were to investigate differences in leadership style due to the sex role of the leader, to determine if sex-typed leaders could be trained to adopt cross-sex behaviors, and to discover if Androgynous leaders and trained sex-typed leaders were similar as compared to untrained sex-typed leaders.

There were three specific aims of this research.

(1) The first aim was to investigate differences on task and socioemotional measures between untrained sex-typed and Androgynous leaders. It was assumed that untrained sex-typed leaders would be perceived in a traditional sex role stereotyped fashion. Feminine females would be

rated higher on socioemotional measures than Masculine males. Masculine males would be rated higher on task-oriented measures than Feminine females. Untrained Androgynous leaders of both sexes would be rated high on both socioemotional and task-oriented measures.

(2) The second aim was to study the influence of training upon perceptions of task and socioemotional behaviors demonstrated by sex-typed leaders. It was anticipated that a training program would increase the use of task-oriented behaviors by Feminine female leaders and would increase the use of socioemotional behaviors by Masculine male leaders. In general, trained leaders would be perceived to engage in the cross sex-typed leadership style significantly more than their untrained counterparts.

(3) The third aim was to discover if untrained Androgynous leaders and trained sex-typed leaders would be perceived to be high on both task and socioemotional measures and thus be dissimilar to untrained sex-typed leaders. Are Androgynous untrained male leaders perceived significantly higher on socioemotional measures than untrained Masculine male leaders and are Androgynous untrained female leaders perceived significantly higher on task-oriented measures than untrained Feminine female leaders?

Analysis of Untrained Group Leaders

To test the first aim of the study a comparison was made of untrained sex-typed and untrained Androgynous leaders of both sexes (untrained FF, untrained MM, untrained AF, and untrained AM). Leaders were compared by three sets of data: perceptions of the leadership style, perceptions of group atmosphere, and perceptions of group productivity and socioemotional relations. All these measures help to differentiate task and socioemotional styles of leadership.

(1) Hypothesis 1: Untrained MM leaders would be rated significantly higher than untrained FF leaders on task-oriented measures.

(2) Hypothesis 2: Untrained FF leaders would be rated significantly higher than untrained MM leaders on socioemotional measures.

(3) Hypothesis 3: No differences were expected to be perceived between untrained AF and untrained AM leaders on task and socioemotional measures.

(4) Hypothesis 4: Untrained Androgynous leaders would not differ from untrained MM leaders on task-oriented measures, but would differ on socioemotional measures.

(5) Hypothesis 5: Untrained Androgynous leaders would not differ from untrained FF leaders on socioemotional measures, but would differ on task-oriented measures.

Analysis of Trained Versus Untrained Sex-typed Leaders

To test the second aim of the study a comparison was made between trained and untrained sex-typed leaders to determine if trained leaders differed significantly from untrained leaders on task and socioemotional measures. These comparisons were made on the same three measures used in the above hypotheses.

(1) Hypothesis 6: Trained MM leaders would be rated significantly higher than untrained MM leaders on the socioemotional measures.

(2) Hypothesis 7: Trained FF leaders would be rated significantly higher than untrained FF leaders on the task-oriented measures.

(3) Hypothesis 8: Untrained MM leaders would be rated higher on task-oriented variables while untrained FF leaders would be rated higher on socioemotional variables. No differences were expected to be found on these variables when comparing trained MM and FF leaders.

Comparison of All Group Leaders

A comparison of all group leaders was made to test the similarity of trained sex-typed leaders and Androgynous leaders, and dissimilarity of those leaders to untrained sex-typed leaders. In addition, many of the same comparisons made in the first two analyses were made.

However, this further analysis allowed all group leaders to be compared simultaneously. The first eight hypotheses were reviewed in this analysis. In addition, two hypotheses were tested to compare trained sex-typed leaders to untrained Androgynous leaders.

(1)Hypothesis 9: No differences on task or socioemotional measures were expected when comparing trained Feminine female leaders with untrained Androgynous female leaders.

(2)Hypothesis 10: No differences on task or socioemotional measures were expected when comparing trained Masculine male leaders with untrained Androgynous male leaders.

In conclusion, this research was intended to examine the effectiveness of training in counteracting established sex-typed modes of leadership behavior. The analyses examined leaders on task and socioemotional measures. Comparisons were made between trained sex-typed leaders, untrained sex-typed leaders, and untrained Androgynous leaders of both sexes to determine if sex role stereotyping occurred and if trained sex-typed and untrained androgynous leaders were perceived in similar fashion.

CHAPTER III
METHODS

Subjects

Subjects were 405 undergraduate students enrolled in psychology courses at the University of Florida, Spring and Summer Semesters, 1983. A screening questionnaire was given to all students in two sections of Theory of Personalilty (PPE 3004; a junior level course), two sections of Personal Growth & Adjustment (PCO 2714; a sophomore level course), and seven sections of Introductory Psychology (PSY 2019). In the first two courses (PPE 3004 and PCO 2714) students praticipated in the class project during regularly scheduled classes. The task they completed for this research was deemed to be an educational unit valuable in all those courses (i.e., learning how to do a systematic desensitization hierarchy). Students were given course credit toward their final grade for participation in this study. However, other options were made available in case they chose not to participate. In the last course, students are required to earn five credits of research. They could earn two credits by signing up to participate in this project. If students elected to participate in this research, they were asked to attend classes for one of the sections of either PPE 3004 or PCO 2714 when the experimental task was conducted. Some of the students who participated in this study were selected to be leaders and contacted one week before the experimental task.

Potential leaders were identified using the screening questionnaire. After 81 potential leaders had agreed to participate as a leader in this study, the remaining students were divided into 81 five person mixed-sex groups (a leader, two males, and two females). In all, 201 males and 204 females (81 groups) participated in the task used for the final data analysis of leader perceptions (provided by members only) and group atmosphere perceptions (completed by leaders and group members).

Although there may be age, ethnic, and leadership experience differences among the selected leaders, such demographic differences were considered to be outside the focus of this study. While these variables were not manipulated, an attempt was made to hold them as constant as possible. Only Causasian subjects were considered for the leadership role. Data collected on age indicated the mean age was 19.9, s.d. = 2.5. All but four selected leaders (age 23, 24, 24, and 27) were within the range of one standard deviation of the mean. Prior leadership experience was not a dependent variable. However data collected on the number of different leadership positions a subject had held indicated the sample had averaged 1.07 leadership positions.

Only two leaders exceeded three prior leadership experiences (1 s.d.). In conclusion, the variables of age, sex, and prior leadership experience were not manipulated, but an attempt was made to hold them as constant as possible. The bearings such factors have on leadership training studies will await further investigation.

Selection Instrument

At the beginning of the semester all students who were enrolled in the target classes completed a Consent Form (Appendix A), the Bem Sex Role Inventory (Bem, 1974), and several other questionnaires. The Bem Sex Role Inventory was used to decide which students would be selected as leaders. The other questionnaires were completed in order not to place undue focus on the sex role orientation being obtained on the Bem Sex Role Inventory. The other questionnaires which were not used for leader selection or data analysis included the Dominance Scale of the California Psychological Inventory (Gough, 1975), the Internal-External Locus of Control Scale (Rotter, 1966), and the the Mach IV (Christie & Geis, 1970). These two questionnaires contained several items on leadership. Leaders were told they were selected for the leadership role based on the prescreening test results. Thus those questionnaires rendered that bogus information more believable.

Bem Sex Role Inventory

The Bem Sex Role Inventory (BSRI) is a self-report instrument consisting of sixty personality characteristics designed to measure the extent of a person's identification with socially desirable masculine and feminine traits (Bem, 1974). Subjects rate themselves on each of the sixty items using a one to seven scale ranging from Never or almost never true of you to Always or almost always true of you. The sixty items were previously scaled as being desirable traits for males (20 items), desirable traits for females (20 items), or desirable for both males and females (20 neutral items). The mean rating for the twenty feminine traits is called the Femininity Score (F). Similarly, the mean rating for the twenty masculine traits is called the Masculinity Score (M). The twenty neutral items can be used to assess a social desirability response set. The twenty items included in the Masculinity and Femininity subscales are itemized in Table 1 below.

Comparison of the F and M scores using one of the available scoring methods yields an Androgyny Score (A) and an Undifferentiated Score (U). There are several available methods for scoring the BSRI, including the Bem Difference Score (Bem, 1974), the Median Split Method (Spence, Helmreich, & Stapp, 1975), or the combined approach advocated by Orlofsky, Aslin, and Ginsburg (1977). The combined approach was selected for this study to provide the

TABLE 1

Items on the Bem Sex Role Inventory by Sex Type

Masculine Items	Feminine Items
Self-reliant	Yielding
Defends own beliefs	Sensitive to the needs of others
Independent	Gentle
Makes decisions easily	Shy
Assertive	Affectionate
Strong personality	Flatterable
Forceful	Loyal
Analytical	Feminine
Has leadership abilities	Sympathetic
Willing to take risks	Cheerful
Athletic	Understanding
Self-sufficient	Compassionate
Dominant	Eager to soothe hurt feelings
Masculine	Soft-spoken
Willing to take a stand	Tender
Aggressive	Warm
Acts as a leader	Gullible
Individualistic	Childlike
Competitive	Does not use harsh language
Ambitious	Loves children

most conservative scoring system of identifying sex-typed subjects. This combined approach uses both the Bem Difference Score Method and the Median Split Method to classify subjects as either Feminine, Masculine, Androgynous, or Undifferentiated.

The Bem Difference Score is computed by subtracting the M score from the F score (F - M) and computing a t-ratio on this difference score. A t-ratio divides the F - M difference by one of two available variance terms. The method used for this study bases the variance term on each individual protocol reflecting the variance in the subject's responses to the twenty feminine items and to the twenty masculine items as shown in Table 2.

TABLE 2

Scoring Procedure Utilized for the Bem

$$t = \frac{(F - M)}{\frac{s^2}{n_f} + \frac{s^2}{n_m}}$$

$$\text{where } s = \frac{n_f s_f^2 + n_m s_m^2}{n_f + n_m - 2}$$

and $n_f = n_m = 20$ if the person responded to all items.

Another variance term used in research studies is an approximated variance term based on the average variance of 917 students (Bem, 1974). This estimate (2.322) was found to be empirically similar (r = .98) to individually derived t-ratios. However to insure the greatest accuracy in the sex-typing determinations, the individualized variance term was preferred over this approximated term for the current study.

The resulting t-ratio is used to classify the subject as Feminine (endorsing the twenty feminine traits as being more self descriptive), as Masculine (endorsing the twenty masculine traits as being more self descriptive), or as Androgynous (endorsing masculine and feminine traits to a similar degree). The sex role orientation is determined to be Feminine if $t > 2.025$, Masculine if $t < -2.025$, and Androgynous if $|t| < 2.025$. These values correspond to the .05 level of significance for t with 38 degrees of freedom.

As can be seen, using the Bem Difference Score three sex role orientations could be obtained, but the more recent classification of Undifferentiated is not a possible computation in this system. Consequently, several studies criticizing Bem's Difference Score method (Kelly & Worell, 1977; Spence et al, 1975; Strahan, 1975) have argued that the BSRI ignored the absolute value of items endorsed in determining the Androgyny classification. People who endorsed the feminine and masculine items to a similar degree would be labeled as androgynous whether they felt that M and F items were both very descriptive of themselves, or that M and F items failed to describe themselves. These two groups of individuals were not necessarily similar. A system was needed to differentiate the two types and rectify the Androgynous classification problem.

In response to this criticism Spence et al. (1975), developed the Median Split Method to sex-type individuals into four classifications: Feminine, Masculine, Androgynous, or Undifferentiated. Based on the entire sample, all F scores were compiled to derive a sample F mean score (denoted SF) and all M scores were compiled to derive a sample M mean score (denoted SM). Each subject's individual F and M scores were then compared against the sample F and M means to be classified as Feminine if F >= SF but M < SM, Masculine if M >= SM but F< SF, Androgynous if F >= SF and M >= SM, and Undifferentiated if F < SF and M < SM.

Bem (1977) used the Median Split Method to return to her earlier studies to weed out the Undifferentiated subjects from the subjects classified as Androgynous. In doing so, she discovered significant differences between Androgynous and Undifferentiated subjects on self-esteem, nurturance, and disclosure. Multiple studies have supported the use of the Undifferentiated classification, reporting that Undifferentiated subjects were significantly less adjusted and lower in self-esteem than Androgynous subjects (Bem, 1977; Bernard, 1980; Flaherty & Dusek, 1980; Gilbert, Waldroop, & Deutsch, 1981; Hinrichsen et al., 1980; Kelly et al., 1981; Klein & Willerman, 1979; Major et al., 1981; Orlofsky, 1977; Sedney, 1981; Spence et al., 1975).

A weakness was noted in the Median Split Method in scoring the Feminine and Masculine sex-typed individuals. For example, if the Sample means were SF = 5.0 and SM = 5.0, and a subject's scores were F = 5.00 and M = 4.95, the subject would be classified as Feminine even though the feminine items had not been endorsed to a significantly greater degree than the masculine items.

The combined approach used by Orlofsky et al. (1977) and Sedney (1981) appears to attend to the weaknesses inherent in each scoring system insuring the best determination of sex-typed individuals. The criteria used to classify subjects in this study is outlined in Table 3.

The BSRI appears to be a psychometrically sound instrument (Bem, 1974; Gross, Batlis, Small, & Erdwins, 1979; Kelly & Worell, 1977). Multiple studies exploring the behavior of sex-typed individuals have tended to support the predictive utility of the scale (Bem, 1975; Bem & Lenney, 1976; Bem et al., 1976). Bem (1974) reports good internal consistency, test-retest reliability, and low correlations of F and M subscales. Factor analyses on the BSRI, however, have indicated that more than two dimensions may be measured on this scale (Gaa, Liberman, & Edwards, 1979; Gaudreau, 1977; Moreland, Gulanick, Montague, & Harren, 1978; Waters et al., 1977; Whetton & Swindells, 1977). Serious criticism has been directed towards the negative valence of many of

TABLE 3

Sex-typing Classifications Using the Combined Scoring Approach

Sex-typed Classification	Bem Difference Score	Median Split Score	Sex
FF	$t > 2.025$	$F >= SF$ *	female
MM	$t < -2.025$	$M >= SM$	male
AF	$\lvert t \rvert < 2.025$	$F >= SF$ and $M >= SM$	female
AM	$\lvert t \rvert < 2.025$	$F >= SF$ and $M >= SM$	male
U	**	$F < SF$ and $M < SM$	male/ female
Crossed (MF)	$t < -2.025$	$M >= SM$	female
Crossed (FM)	$t > 2.025$	$F >= SF$	male

* A subject did not have to meet the full criteria established by the Median Split Method (i.e., $F >= SF$ and $M < SM$). Once a significant difference in the F and M scores had been determined by the Bem Difference Score Method, and there was endorsement of the sex-typing (in the direction indicated by the Bem Difference Score) which was equal to or greater than the mean endorsement of that sex-typing in the sample, then the sex-typed classification was accepted.

** There are no criteria for making this classification using this scoring method.

the identified feminine traits as opposed to the masculine traits (Pedhazur & Tetenbaum, 1979; Kelly & Worell, 1977; Stoppard & Kalin, 1978). Many of the negative valenced items are the ones Gaudreau (1977) suggested should be eliminated on the BSRI. A revised version of the BSRI has been made, abbreviating the number of items used in each subscale (Bem, 1979; Lubinski, Tellegen, & Butcher, 1981). While still in its infancy, it awaits validation studies to support its utilization. Therefore, despite the criticisms, the BSRI (original version) which has had the most experimental attention and validation was chosen as the selection instrument for this study.

Selection

The combined method for scoring the BSRI was used to identify the sex role orientation of subjects who were considered for the leadership role. Students who completed the BSRI were placed in one of the categories outlined in Table 3. These categories met the criteria for both the Median Split and the Bem Difference Score classification systems. Only those individuals who were placed in the first four categories were considered for the leadership positions. Cross sex-typed and undifferentiated subjects were only considered for the group participant role.

Leaders were selected from four randomized lists of qualifying candidates: Feminine sex-typed females (FF), Masculine sex-typed males (MM), Androgynous females (AF), and Androgynous males (AM). During a class meeting a week before the experimental task, the list of randomized names was read out loud, allowing each person to accept or reject the leadership role being offered. Once a similar number of leaders had accepted in the four categories, a brief meeting was held for those leaders who were in the classes not selected for training. The leaders selected for training from the other classes were informed of the three available training sessions they could attend. The leaders selected to serve as the untrained comparison groups were given a brief explanation detailing their responsibilities as leaders in the task they would be doing in class the following week. The pre-task lecture for the leaders who would not be trained was designed to give the selected leaders recognition of their position and to give them some preparation for the upcoming task. Instructions to concentrate on the group process as well as the task were included; i.e., "You will be expected to guide your subordinates to complete the task," and "All members of your group are expected to participate." (See Appendix B.) The basic premise underlying this pretask briefing was that if a pep talk (placebo) was sufficient (i.e., no differences were found between trained and untrained leaders on the leader evaluations and group measures of task success and socioemotional relations) then training programs would be unnecessary.

The distribution of leaders selected in the four categories from each class, used in the final data analysis, is illustrated in Table 4. This table indicates the number of leaders in each of the four sex role categories selected from each classroom differentiating those leaders who were selected for training. As can be seen, selected leaders in one of the junior level courses and in one of the sophomore level courses participated in leadership training preceding the task.

TABLE 4

Distribution of Sex-Typed Leaders by Class

Class	Trained	Leader Type FF	MM	AF	AM	Total
PPE 3004	No	4	1	1	3	10
PPE 3004	No	3	2	4		9
	Yes		1			1
PCO 2714	Yes	12	13			31
PCO 2714	No	12	8	2	2	24
PSY 2019	No		1	4	8	13
Subtotal	No	19	12	11	13	55
Subtotal	Yes	12	14			26
Total		31	26	11	13	81

The results of the BSRI classifications for the 405 subjects who participated in this study indicated 28% of the females were identified as Feminine sex-typed, 40% of the males were identified as Masculine sex-typed, 27% of the females and 16% of the males were identified as Androgynous. In this sample 5% of the females and 2% of the males were identified as cross sex-typed, and 40% of the females and 42% of the males were identified as undifferentiated.

Leadership Training

Content of Training

There were 26 leaders selected from one of the junior level courses and from one of the sophomore level courses who attended a three hour training program one week prior to the date they completed the experimental task. Three training sessions were offered over a three day period; selected leaders were told to attend one of those sessions. After three sessions of training, 12 Feminine females and 14 Masculine males had participated in the leadership training.

The training was performed by a male and female team with the responsibilities for lecture material and task instructions being equally divided between the two to avoid emphasizing one sex as a model for leadership. The focus of training was to increase the use of socioemotional-oriented behaviors (particularly in male leaders) and task-oriented behaviors (particularly in female leaders). The emphasis was placed on leader behavior that was both productive and achieved good group participation and satisfaction. Six behaviors were identified for this training program, based on the recommended training literature (Blake & Mouton, 1964, 1980a, 1980b, 1982; Sargent, 1981). Three of the identified behaviors represented socioemotional skills considered to increase group participation and favorable group atmosphere: (1) solicit ideas of all members by asking open-ended questions; (2) listen and give feedback when someone contributes; and (3) deal with differences of opinions by summarizing both sides, without ignoring the conflict. The other three identified behaviors represented task-oriented skills considered to increase productivity and efficient task completion: (1) explain and clarify the task periodically to keep the group informed and on task; (2) voice your personal opinions about what has to be done and how to do it; and (3) organize the incoming ideas by summarizing and outlining the direction the task is going.

The training model was based upon the work of Blake and Mouton (1964, 1980a, 1980b, 1982). They use a managerial grid to assess a leader's concern for people on one axis and concern for production on the other axis. There are five basic styles of leadership generated from this grid approach which have been described in the previous review of training literature. A high concern in both areas has been viewed as the most favorable leadership approach. The five different styles of leadership are shown in Appendix D. This description of the five leadership styles was disseminated to the leader trainees. Blake and Mouton have also designed an assessment measure to help individuals gain insight into their perceived style of leadership (Appendix E). This form contains a brief explanation of the five leadership styles used in six situations listing how each of the leader styles would react in each situation. Subjects who complete this form check the overall description that best fits their leadership style and then circle each of the responses that seems most similar to how they would react in each of the six specified situations. Through a comparison of how they would react in each of the six situations, subjects are expected to gain some insight about the variability of their leadership style as well as their predominant style. This evaluation form was completed as a pretraining assessment in the current study.

The training was divided into six units to cover each of the identified behavioral skills. Each unit has an objective, a target behavior to perform, examples, a group exercise to practice the targeted behavior, and a feedback session. Appendix G contains the entire training package divided into its six units.

Training Format

The training session was begun with a brief lecture to orient leader-trainees to the format and expectations of the training program. This lecture is reproduced in Appendix C. The students were given the grid handout (Appendix D) and the preassessment evaluation form (Appendices E and F). After they had completed the preassessment, the students were divided into groups of four; in most cases the groups contained two males and two females. For each task one of the group members assumed the leadership role; the rest acted as subordinates. The leadership role rotated with emphasis on males assuming the leadership role when practicing a socioemotional behavior and females assuming the role when practicing a task-oriented behavior.

Each unit was presented in a similar fashion. All six units are described in Appendix G. A brief didactic presentation reviewed the target behavior and provided examples of how to perform that behavior. Examples were written on the board to use as a reference while they participated in a practice task. A trainee in each group was assigned to be the leader and was instructed to practice the targeted behavior while their group performed the assigned task. The tasks were conversational as opposed to manual performance activities. The groups were given approximately 15 minutes to work on each task after which time they all filled out a leader evaluation form (Appendix H). Time was also allowed for the group to verbally discuss their feedback about the leader's performance on the stated objective.

After completion of the six training units leaders were reminded of the upcoming experimental task responsibilities.

The same pretask talk that was given to untrained leaders was given to these trained leaders at the completion of their training program.

Experimental Procedures

Group Assignment

After the leaders had been selected, two randomized lists of unselected males and females were created for each classroom. These lists included the names of Introductory Psychology students who had signed up to participate during that time period. The decision to include the Introductory Psychology students was based on the need to increase the number of males available for the group assignments since all four classrooms had a greater proportion of females enrolled.

During the first few minutes of the class groups were formed by calling out a selected leader's name and coupling that leader with the first two males and first two females off the randomized lists who were present that day in class. Each group used for the final data analysis consisted of a leader, two males, and two females.

Task

Once the groups had been assigned, the experimental task was conducted during a two hour class period. Leadership training preceded the task by one week, and all classes participated in the task within a two week period.

The format during the two hours was to present a brief lecture on systematic desensitization and a case example of how to develop a ten-step hierarchy. The lecture and case example were reproduced verbatim and copies were given to each group leader (Appendices I and J). This material served as a reference for the group during the experimental task. Following the lecture the class was divided into groups of five as described in the section on group assignment. The leaders were given an Information Packet to use as a reference in completing the experimental task. This was to insure that each group had the resources to work independently, without resorting to asking the experimenters for assistance. The Information Packet consisted of four parts including (1) the verbatim lecture on systematic desensitization (Appendix I), (2) the case example used during the lecture which provided a model of a ten-step hierarchy (Appendix J), (3) a review of the group goals to be accomplished during the experimental task (Appendix K), and (4) a Group Task Sheet which the group completed and turned in at the conclusion of the experimental task (Appendix L).

Each group was allowed to spend 45 minutes brainstorming a strategy to deal with a client with a selected fear. Then the group developed a ten-step hierarchy to help desensitize the client to the expressed fear. A full description of the client was provided in the Group Task Sheet (Appendix L).

The Group Task Sheet was filled out at the conclusion of the task, specifying the ten-step hierarchy that the group developed.

When the leaders were given the Information Packet they were told they were responsible for leading the discussion of their group, for helping the group to devise a creative strategy to deal with their given client, and to insure that the group completed as much of the task as was possible during the allotted time. Emphasis was placed on group participation and quality task completion.

After spending 45 minutes with their groups, the leaders met at a specified location to turn in their Information Packet and a written version of the hierarchy that the group developed. While separated from their groups, leaders completed the two group questionnaires. During the leaders' absence the members completed the Leader Questionnaire as, well as the two group questionnaires. After the questionnaires were collected, the groups reassembled in the classroom to discuss their respective group's success with developing a hierarchy. The debriefing session was held several weeks later following the completion of all data collection.

Instruments

The post-task instruments employed in this study included (1) the Leader Questionnaire (LQ) which measured the leader's behavior as perceived by the group members and (2) two group measures, the Group Atmosphere Questionnaire (GAQ) and the Group Process and Functioning Scale (GPFS), which measured the leaders' and group members' perceptions of their groups' atmosphere, task success, and task and interpersonal processes. The leader completed the two group questionnaires. The group members completed the LQ and the two group questionnaires.

Leader Questionnaire (LQ)

The LQ (Appendix M) was used to assess the group members' perceptions of their leader's performance. It was adapted from the Leader Behavior Description Questionnaire, or LBDQ XII (Stogdill, 1963) and the Supervisory Behavior Description Questionnaire, or SBDQ (Fleishman, 1953). Many of the original items from these scales were eliminated or reworded for use on the LQ to fit the current task situation. The eliminated items from the LBDQ XII and SBDQ reflect on-going work groups that perform over a longer period of time (i.e., Encourages overtime work, Is working hard for a promotion. Represents the group at outside meetings, etc.) The LQ consisted of 46 items, 36 of which were drawn from four subscales of the LBDQ XII and SBDQ.

Ten additional items were included to measure task preoccupation, amount of eye contact and verbal behavior, and aggressive leadership behaviors. The origin of each item is described in Appendix N.

The LBDQ XII and SBDQ were designed to obtain descriptions of leadership behavior from people being supervised. They evolved from work initiated in the 1950's (e.g., Hemphill & Coons, 1957) and are often referred to as the Ohio State Leadership Questionnaires. The LBDQ XII contains 12 subscales (Stogdill 1963, 1974). Most studies tend to utilize only two of the subscales, Initiating Structure and Consideration. The current study utilized four of the subscales from the LBDQ XII including (1) Initiating Structure (IS): the leader clearly defines his or her own role and lets followers know what is expected of them; (2) Role Assumption (RA): the leader actively exercises the leadership role rather than surrendering leadership to others; (3) Consideration (C): the leader has regard for the comfort, well-being and contribution of his or her followers; and (4) Integration (I): the leader maintains a close knit group and resolves inter-member conflicts.

The SBDQ, which shares its history with the LBDQ, includes only two dimensions, IS and C. These two subscales contain many of the same items included in the IS and C subscales of the LBDQ XII, with 10 additional IS items and

18 additional C items. Twelve items (2 IS and 10 C items) were selected from the SBDQ to include on the Leader Questionnaire.

Lastly, 10 additional items were included in the Leader Questionnaire to represent task preoccupation (TP), amount of talk (VB) and eye contact (EC), and aggressive leadership (AL). All totaled, there were 46 items which were randomly ordered with 14 reversed items contained on the Leader Questionnaire. These items were divided into eight subscales: IS (7 items), C (19 items), RA (7 items), I (3 items), TP (4 items), EC (2 items), AL (2 items), and VB (2 items) identified in Appendix N. Two of these subscales were considered to be task-oriented subscales (IS and TP). Five were considered to be socioemotional subscales (C, I, EC, VB, and AL). The AL subscale, while measuring aggressiveness of the leadership style, was considered to be a socioemotional subscale with negatively loaded items. The last subscale, RA, was considered to be neither socioemotional nor task-oriented. It was a measure of leadership role assumption.

Group members were instructed to rate their leader on the 46 items using a Likert scale from 1 to 5, indicating the extent to which their leader demonstrated that behavior. The scale ranges from Never (0% of the time) to Always (100% of the time), rated from 1 to 5 respectively. Group means can be obtained for each of the eight subscales.

Means and standard deviations for the LBDQ subscales are available in the source document (Stogdill, 1963) with cited Kuder-Richardson internal reliability values. Additional information on means and standard deviations for student populations can be found in Green et al. (1976), Ilgen and Fujii (1976), Mitchell et al. (1977), and Rush et al. (1977). Since a different variation of the subscales was utilized in this study, comparison to previous means will not be carried out.

Internal reliability of the utilized scales is generally acceptable, ranging from .75 to .90 (Schriesheim, Kinicki, & Schriesheim, 1979; Schriesheim & Stogdill, 1975). It has been reported that approximately three fourths of all leadership studies have utilized the LBDQ though rarely is the complete instrument used (Hunt, Osborn, & Schriesheim, 1977). The primary focus has been on the subscales of C and IS with extensive evidence documenting good reliability across a wide range of samples in field and in laboratory settings. Factor analytic studies have tended to support the separate orthogonal identity of these two dimensions (Fleishman, 1953; Halpin & Winer, 1957; Schriesheim & Stogdill, 1975; Schriesheim & Von Glinow, 1977) though their theoretical independence has been questioned (Kerr & Schriesheim, 1974; Korman, 1966; Stogdill, 1974; Yunker & Hunt, 1976). The other critical issue with these two subscales has been the positive correlation often cited between subordinates' perceptions of the leaders Consideration behavior and subordinates' reported satisfaction (Schriesheim et al., 1979). It is concluded that social desirability factors are influencing the correlations of satisfaction measures with the C but not the IS subscales. The IS subscale appears unaffected by this leniency effect.

The SBDQ has fewer reported means and standard deviations for its two subscales, C and IS (Fleishman, 1972; Matsui, Ohtsuka, & Kikuchi, 1978; Petty & Lee, 1975). There has been considerable evidence for good reliability and factor structure (Kerr & Schriesheim, 1974; Schriesheim, House, & Kerr, 1976). Relationships between C scores and measures of satisfaction are, like the LBDQ, considered tautologous primarily because the two measures usually include similar items.

Group Scales

Two brief scales were included in this study to assess the affective relations, the perceived task success, and the satisfaction in one's asigned work group. One scale is the Group Atmosphere Questionnaire (GAQ) developed by Fiedler (1967). The other scale used in this study, the Group Process and Functioning Scale (GPFS) is an adapted version of the Group Processes Scale (Taylor & Bowers, 1972) and the Work Group Functioning Scale (Cammann, Fichman, Jenkins, & Klesh, 1979; Seashore, Lawler, Mirvis, & Cammann, 1982), Group Atmosphere Questionnaire. A questionnaire was developed by Fiedler (1967) to assess the affective relations perceived in the group. Fiedler intended its use for leaders only to indicate the extent to which the leader felt accepted by his or her subordinates and saw the group as tension-free. In this study both leaders and group members completed the Group Atmosphere Questionnaire (GAQ) to obtain an overall average of tension and affective relations in the groups as well as a comparison of leader and subordinate perceptions on these dimensions. Rice et al. (1980) reported correlations between leaders' ratings and average group members' ratings of 0.56 and 0.15 for structured and unstructured tasks respectively. Since the current study employs a relatively unstructured task, it seemed important to assess the correlation between leader and group member perceptions.

The GAQ is comprised of ten pairs of adjectives separated by an eight point response line. The positive and negative poles are on the 8 and 1 ends of the pole respectively. Subjects are instructed to place an X along the continuum to indicate the extent to which that item describes their group atmosphere. The scale score is the sum or the mean of the 10 item scores. The polarity of the items does not vary. Thus the scale is vulnerable to response bias (Cook, Hepworth, Wall, & Warr, 1981).

Fiedler (1967) provides little information on the scale development, nor does he provide means and standard deviations. He does report a 0.90 split-half reliability coefficient with test-retest correlations of 0.73 and 0.83. Other sources that have used this scale report means that vary from 52.82 to 67.00 (Bartol, 1974; Bons & Fiedler, 1976; Nebeker, 1975), with alpha reliability coefficients ranging from 0.86 to 0.93 (Bartol, 1974; Rice et al., 1980).

In addition to the ten pairs included on Fiedler's scale, there was an eleventh pair attached to measure how organized vs. unorganized the group atmosphere was perceived to be. The eleven pairs of items appear to represent five socioemotional factors (friendly, accepting, satisfying, warm, and supportive), three instrumental factors (productive, successful, and organized), and three items that can contribute to both socioemotional and instrumental success (enthusiastic, cooperative, and interesting).

Group Process and Functioning Scale.. Four items on this scale were selected from the Group Process Scale (Taylor & Bowers, 1972) which has seven original items. Three items were not considered relevant to the current task situation. The four items selected measure the extent to which the group was perceived to have good task processing, i.e., to have coordinated its efforts, to have made good decisions, to have been motivated to complete the task, and to have had confidence in the other group members.

The scale was developed at the Institute for Social Research at the University of Michigan. They reportedly used only the most valid, reliable, and efficient items indicated from their earlier studies, but they do not provide any further information about item selection. They did report an alpha coefficient of 0.96. The scale was intended to poll cooperation, competence, and task motivation of group members. Each of the items are rated on a 5-point continuum, from A Very Little Extent (0% of the time) to A Very Great Extent (100% of the time), rated from 1 to 5 respectively. The items are averaged for each individual, and then group members' scores are averaged for each group.

Eight other items were included on this scale and were formatted on the same 1 to 5 continuum with similar wording of the items (i.e., To what extent...). Six items were drawn from two subscales of the Work Group Functioning Scale (Cammann et al., 1979; Seashore et al., 1982). This included a two item group Cohesiveness subscale (how much a part of the group the subject and the average member felt), and a four item Socioemotional Group Process subscale (felt listened to, involved, able to contribute, and respected contributions of others). Alpha coefficients reported on those two subscales were 0.64 and 0.72 respectively.

Lastly, two items were included on the GPFS to assess subjects' perceptions of group organization and productivity. The items included in each of the four subscales in the GPFS -- Cohesiveness, Socioemotional Group Process, Task Processing, and Group Productivity -- are identified in Appendix O. Again all items were rated on the 5-point continuum. The items in each of the four subscales were averaged, and a group mean was obtained for each of the four areas.

CHAPTER IV
RESULTS

Overview of the Analyses

Three questionnaires were analyzed to assess leader behavioral styles and group task and socioemotional relations: 1) the Leader Questionnaire (LQ), an adapted version of the LBDQ XII (Stogdill, 1963), 2) the Group Atmosphere Questionnaire (GAQ) developed by Fiedler (1967), and 3) the Group Process and Functioning Scale (GPFS) which is an adapted version of the Group Functioning Scale (Taylor & Bowers, 1972) and the Work Group Functioning Scale (Cammann et al., 1979; Seashore et al., 1982). All subjects filled out the two group measures, the GAQ and the GPFS. Leaders were excluded from rating their own performance, thus only group members completed the Leader Questionnaire.

In order to test the hypotheses data were analyzed in three separate ways which compared different combinations of Feminine sex-typed females (FF), Masculine sex-typed males (MM), Androgynous females (AF), and Androgynous males (AM) on leader and group evaluations. To test the first set of hypotheses concerning the impact of sex role stereotyping on leader perceptions only data from untrained groups were included (untrained MM, FF, AF, and AM groups). The second set of hypotheses concerning training effects included data from sex-typed leaders (trained and untrained MM and FF). The third set of hypotheses concerning the similarity of androgynous leaders and trained sex-typed leaders in comparison to the untrained sex-typed leaders included data from all six groups (untrained and trained MM and FF and untrained AM and AF).

All leaders and groups were compared on four task-oriented subscales, eight socioemotional subscales, and on assumption of the leadership role measured on one subscale. The task-oriented subscales included two assessments of leadership style measured on the Initiating Structure (IS) and Task Preoccupation (TP) subscales of the Leadership Questionnaire, and two assessments of group task functioning measured on the Task Processing and Group Productivity subscales of the Group Process and Functioning Scale. The socioemotional subscales included five assessments of leadership style measured on the Consideration (C), Integration (I), Eye Contact (EC), Verbal Behavior (VB), and Aggressive Leadership (AL) subscales of the Leader Questionnaire and three assessments of group socioemotional functioning measured on the overall Group Atmosphere Questionnaire (GAQ) and on the Cohesiveness and and Socioemotional Group Process subscales of the Group Process and Functioning Scale. The assessment of leadership role assumption was measured on one subscale of the Leader

Questionnaire, the Role Assumption (RA) subscale. A thorough description of the designs and results obtained are presented in the following sections.

Analysis of Untrained Groups

Two analyses were performed to test the first set of hypotheses regarding differences between untrained leaders. One set of analyses examined the results on the group measures, the GAQ and the GPFS. Another sex examined the leadership style measures on the LQ. On the first set of analyses a two-way Analysis of Variance was performed with two levels of role (leader and member) and four levels of leader sex role orientation (FF, MM, AF, AM) as the independent variables on the GAQ and GPFS completed by leaders and group members in the untrained leader groups. The dependent variables in this analysis were the mean score on the GAQ and the mean scores on the four subscales of the GPFS. On the second set of analyses a one-way Analysis of Variance was performed with four levels of leader sex role orientation (FF, MM, AF, AM) as the independent variables on the LQ. The dependent variables in this analysis were the mean scores on the eight subscales of the LQ completed by group members only in the untrained leader groups.

Group Measures

GAQ. A two-way Analysis of Variance was performed on the mean score on the GAQ (n=272) with four levels of leader sex role orientation (untrained FF, MM, AF, and AM) and two levels of role (leaders and members). Results indicted no significant differences between the leader sex role orientations in perceptions of group atmosphere (see Table 5 under socioemotional measures). However, there was a main effect for role, $F(1,264) = 4.46$, $p < .05$ (see Table 6 under socioemotional measures). An examination of the means indicated leaders felt the general atmosphere in the group (mean = 6.55) was more positive than did group members (mean = 6.17), although the levels of the means indicated both leaders and members in general rated the group atmosphere to be high (scale = 1 to 8).

GPFS. A two-way Analysis of Variance was performed on the four subscales of Task Processing, Group Productivity, Cohesiveness, and Socioemotional Group Process (n=273) with four levels of leader sex role orientation (untrained FF, MM, AF, and AM) and two levels of role (leader and member). These scales were rated from 1 to 5. The resulting comparison of the means for sex role orientation are presented in Table 5, and the comparison of the means for role are presented in Table 6. A main effect was found for

TABLE 5

Mean Scores and F-Values on Group Measures of Untrained Leaders

Subscales	FF	MM	AF	AM	Degrees of Freedom	F-Value
Socioemotional Measures						
GAQ	6.51	6.14	6.22	6.57	3,264	1.41
GPFS Cohesiveness	3.81	3.91	3.94	4.01	3,265	.68
GPFS Socioemotional Group Process	3.88	3.94	3.97	3.85	3,265	.37
Task-Oriented Measures						
GPFS Task Processing	3.62	3.47	3.67	3.83	3,265	1.77
GPFS Group Productivity	3.60	3.37	3.49	3.72	3,265	1.12

Scale of GAQ items = 1 to 8.
Scale of GPFS items = 1 to 5.
*$p < .05$
**$p < .01$
***$p < .001$

role on the Cohesiveness subscale, $F(1,265) = 14.82$, $p < .001$, with leaders indicating they felt the group was more cohesive (mean = 4.14) than members (mean = 3.70). No other main effects or interactions were found on any subscales.

TABLE 6

Mean Scores and F-Values on Group Measures of Members versus Leaders in Untrained Leader Groups

Subscales	Leaders' Mean Scores	Members' Mean Scores	Degrees of Freedom	F-Value
Socioemotional Measures				
GAQ	6.55	6.17	1,264	4.46*
GPFS Cohesiveness	4.14	3.70	1,265	14.82***
GPFS Socioemotional Group Process	3.98	3.84	1,265	2.01
Task-Oriented Measures				
GPFS Task Processing	3.73	3.56	1,265	2.31
GPFS Group Productivity	3.63	3.46	1,265	1.61

Scale of GAQ items = 1 to 8.
Scale of GPFS items = 1 to 5.
$^{*}p < .05$
$^{**}p < .01$
$^{***}p < .001$

Leader Questionnaire

A one-way Analysis of Variance (n=217) was performed on the mean scores of the eight subscales on the leader questionnaire assessing perceptions of leadership style for the four levels of leader sex role orientation (untrained FF, MM, AF, and AM). These eight subscales have been labeled as Initiating Structure, Consideration, Role Assumption, Integration, Verbal Behavior, Eye Contact, Aggressive Leadership, and Task Preoccupation, or IS, C, RA, I, VB, EC, AL, and TP respectively. The resulting comparison of the means on these eight subscales are presented in Table 7; subscales are presented under the classification of socioemotional, task-oriented, or leadership measures. There was a main effect found on the AL subscale, $F(3,213) = 2.59$, $\underline{p} < .05$. A post hoc analysis was performed using Duncan's Multiple Range test, indicating AM leaders were perceived to be less aggressive (mean = 2.09) than MM leaders (mean = 2.44) and AF leaders (mean = 2.47). The AM leaders were not perceived to differ significantly from FF leaders (mean = 2.22) on the AL subscale. No other comparisons were significant in perceived leader aggressive behavior. Analyses of the other seven subscales indicated no significant differences.

Hypotheses Tested

The purpose of the above analyses was to examine perceived differences among untrained leader groups. Specifically of interest was the comparison of perceived behaviors in different sex role type leaders, untrained. First, it was hypothesized that untrained MM leaders would be rated significantly higher than untrained FF leaders on task-oriented measures. No significant differences were found between the two groups.

TABLE 7

Mean Scores and F-Values on Leader Questionnaire Subscales of Untrained Leaders

Subscales	FF	MM	AF	AM	Degrees of Freedom	F-Value
Socioemotional Measures						
Consideration	3.98	3.89	3.93	3.81	3,213	1.37
Integration	3.36	3.21	3.32	3.22	3,213	.44
Eye Contact	3.60	3.81	3.77	3.49	3,205	1.24
Verbal Behavior	3.25	3.31	3.42	3.14	3,205	.62
Aggressive Leadership	2.22	2.44 a	2.47 b	2.09 ab	3,213	2.59*
Task-Oriented Measures						
Task Preoccupation	2.89	2.82	2.63	2.62	3,213	2.19
Initiating Structure	3.30	3.24	3.21	3.11	3,213	1.86
Leadership Measure						
Role Assumption	3.20	3.23	3.23	2.98	3,213	1.27

Scale = 1 to 5.

Means with similar letters differed significantly, $p < .05$.

*$p < .05$

Second, it was hypothesized that untrained FF leaders would be rated significantly higher than untrained MM leaders on socioemotional measures. No significant differences were found between the two groups.

Third, it was hypothesized that differences would not be found between untrained AF and AM leaders. Group members perceived AM leaders to be less aggressive than AF leaders.

Fourth, it was hypothesized that untrained Androgynous leaders would not differ from untrained MM leaders on task-oriented subscales, but they were expected to differ on socioemotional subscales. At least partial support was found for this hypothesis. No differences were found on the task-oriented subscales. However, on one of the socioemotional measures, aggressive leadership, group members perceived AM leaders to be lower than MM leaders.

Fifth, it was hypothesized that the relationship between Androgynous and FF leaders would be the reverse of the fourth hypothesis, with no differences on the socioemotional subscales and differences predicted on the task-oriented subscales. No differences were noted on either set of subscales.

Analysis of Training Effects

As in the case of the analysis of untrained groups, two analyses were performed to test hypotheses regarding the differences between trained and untrained sex-typed leader groups. One set analyzed the perceptions of the leader behavior, the other set analyzed the perceptions of the group functioning.

A three-way Analysis of Variance was performed with two levels of role (leader and member), two levels of training (trained and untrained), and two levels of leader sex-typing (FF and MM) as the independent variables on the GAQ and GPFS completed by leaders and group members. The mean score on the GAQ and on the four subscales of the GPFS comprised the dependent measures. A two-way Analysis of Variance was performed with two levels of training (trained and untrained) and two levels of leader sex-typing (FF and MM) as the independent variables on the LQ completed by group members only. The mean scores on the eight LQ subscales were the dependent variables for this analysis.

Group Measures

GAQ. A three-way Analysis of Variance was performed on the mean score on the GAQ (n=282) with two levels of training (trained and untrained), two levels of sex-typing (FF and MM), and two levels of role (leader and member). While all groups were perceived to have positive group atmosphere (overall mean = 6.54, scale = 1 to 8), main effects were found for both training and leader sex-type. Table 8 includes the GAQ means, under socioemotional measures for trained and untrained leader groups. The training effect, $F(1,274) = 8.32$, $p < .01$ indicated that the groups of trained leaders were perceived to have a more positive group atmosphere (mean = 6.76) than untrained leader groups (mean = 6.32). Table 9 includes the GAQ mean for FF versus MM leader groups. The leader sex-type effect, F(1,274) = 3.99, $p < .05$ indicated groups led by Feminine female leaders were perceived to have a more positive group atmosphere (mean = 6.69) than groups led by Masculine male leaders (mean = 6.39). No effect for role or any interactions were found on this scale (see Tables 10 and 11).

GPFS. A three-way Analysis of Variance was performed on the mean scores for the four subscales (n=283) with two levels of training (trained and untrained), two levels of sex-typing (FF and MM), and two levels of role (leaders and members). Main effects were found for training on all four subscales. The means are presented in Table 8, indicating groups of trained leaders were rated higher on Cohesiveness (F(1,275) = 13.90, $p < .001$), on Socioemotional Group Process (F(1,275) = 8.97, $p < .01$), on Task Processing (F(1,275) = 28.90, $p < .001$), and on Group Productivity (F(1,275) = 12.50, $p < .001$). In addition, a main effect for role was found on the Cohesiveness subscale (F(1,275) = 8.52, $p < .01$) indicating leaders perceived their groups to be more cohesive (mean = 4.20) than members (mean = 3.90). The mean scores on the GPFS subscales for role and sex-typing effects and the training by sex-type interaction are

TABLE 8

Mean Scores and F-Values on Group Measures of Trained and Untrained Leader Groups

Subscales	Trained Mean Scores	Untrained Mean Scores	Degrees of Freedom	F-Value
Socioemotional Measures				
GAQ	6.76	6.32	1,274	8.32**
GPFS Cohesiveness	4.25	3.86	1,275	13.90***
GPFS Socioemotional Group Process	4.17	3.91	1,275	8.97**
Task-Oriented Measures				
GPFS Task Processing	4.09	3.54	1,275	28.90***
GPFS Group Productivity	3.93	3.48	1,275	12.50***

Scale of GAQ items = 1 to 8.
Scale of GPFS items = 1 to 5.
$^{*}\underline{p} < .05$
$^{**}\underline{p} < .01$
$^{***}\underline{p} < .001$

presented in tables 9, 10, and 11. No other effects were found on the subscales.

TABLE 9

Mean Scores and F-Values on Group Measures of Sex-Typed Leader Groups - Trained and Untrained Sex-typed Leaders Combined

Subscales	FF Mean Scores	MM Mean Scores	Degrees of Freedom	F-Value
Socioemotional Measures				
GAQ	6.69	6.39	1,274	3.99*
GPFS Cohesiveness	4.07	4.04	1,275	.10
GPFS Socioemotional Group Process	4.04	4.04	1,275	.00
Task-Oriented Measures				
GPFS Task Processing	3.81	3.80	1,275	.01
GPFS Group Productivity	3.76	3.65	1,275	.81

Scale of GAQ items = 1 to 8.
Scale of GPFS items = 1 to 5.
*$p < .05$
**$p < .01$
***$p < .001$

TABLE 10

Mean Scores and F-Values on Group Measures of Members versus Leaders in Feminine Female and Masculine Male Leader Groups

Subscales	Leaders' Mean Scores	Members' Mean Scores	Degrees of Freedom	F-Value
Socioemotional Measures				
GAQ	6.58	6.50	1,274	.28
GPFS Cohesiveness	4.20	3.90	1,275	8.52**
GPFS Socioemotional Group Process	4.10	3.98	1,275	2.05
Task-Oriented Measures				
GPFS Task Processing	3.79	3.82	1,275	.07
GPFS Group Productivity	3.70	3.71	1,275	.00

Scale of GAQ items = 1 to 8.
Scale of GPFS items = 1 to 5.
$^{*}p < .05$
$^{**}p < .01$
$^{***}p < .001$

TABLE 11

Mean Scores and F-Values on Group Measures of Trained versus Untrained Sex-Typed Leaders

Subscales	Trained FF	Trained MM	Untrained FF	Untrained MM	Degrees of Freedom	F-Value
Socioemotional Measures						
GAQ	6.88	6.64	6.51	6.14	1,274	.20
GPFS Cohesiveness	4.27	4.23	3.81	3.91	1,275	.48
GPFS Socioemotional Group Process	4.20	4.14	3.87	3.94	1,275	.50
Task-Oriented Measures						
GPFS Task Processing	4.00	4.13	3.62	3.47	1,275	2.15
GPFS Group Productivity	3.92	3.93	3.60	3.37	1,275	1.00

Scale of GAQ items = 1 to 8.
Scale of GPFS items = 1 to 5.
$*p < .05$
$**p < .01$
$***p < .001$

Leader Questionnaire

A two-way Analysis of Variance was performed on the mean scores of the eight subscales of the LQ (n=224) with two levels of training (trained and untrained) and two levels of sex-typing (FF and MM). There were main effects for training on three subscales. Trained leaders were perceived to demonstrate higher levels of role assumption (mean = 3.40) than untrained leaders (mean = 3.21), F(1,220) = 3.73, $p < .05$. Trained leaders were perceived to demonstrate higher levels of Consideration (mean = 4.08) than untrained leaders (mean = 3.93), F(1,220) = 5.48, $p < .05$. They were also perceived to demonstrate more Integration (mean = 3.70) than untrained leaders (mean = 3.28), F (1,220) = 14.09, $p < .001$. The means of all eight subscales for training effects are presented in Table 12. The subscale means for sex-typing and for the interaction of training and sex-typing are presented in Tables 13 and 14, respectively.

An interaction of training and leader sex-type was found on Initiating Structure, F(1,220) = 4.23, $p < .05$ (see 1). Post-hoc simple effects tests indicated trained Masculine male leaders (mean = 3.42) were perceived to demonstrate more IS behavior than either untrained Masculine male leaders (mean = 3.24) or trained Feminine female leaders (mean = 3.25). There was no significant differences between trained and untrained Feminine female leaders (means were 3.25 and 3.29 respectively), or between untrained Masculine male and untrained Femininine female leaders (means were 3.24 and 3.29 respectively). Comparison of other subscales on the LQ yielded no significant differences.

TABLE 12

Mean Scores and F-Values on Leader Questionnaire Subscales for Trained and Untrained Leaders

Subscales	Trained Mean Scores	Untrained Mean Scores	Degrees of Freedom	F-Value
Socioemotional Measures				
Consideration	4.08	3.93	1,220	5.48*
Integration	3.70	3.28	1,220	14.09***
Eye Contact	3.90	3.70	1,213	2.53
Verbal Behavior	3.40	3.28	1,213	.83
Aggressive Leadership	3.27	2.33	1,220	.35
Task-Oriented Measures				
Task Preoccupation	3.00	2.85	1,220	2.44
Initiating Structure	3.34	3.27	1,220	1.55
Leadership Measure				
Role Assumption	3.40	3.21	1,220	3.73*

Scale = 1 to 5.

*$p < .05$

**$p < .01$

***$p < .001$

TABLE 13

Mean Scores and F-Values on Leader Questionnaire Subscales for Sex-Typed Leaders - Trained and Untrained Combined

Subscales	FF Mean Scores	MM Mean Scores	Degrees of Freedom	F-Value
Socioemotional Measures				
Consideration	4.00	4.01	1,220	.03
Integration	3.48	3.50	1,220	.01
Eye Contact	3.90	3.70	1,213	2.81
Verbal Behavior	3.35	3.33	1,213	.04
Aggressive Leadership	3.34	2.25	1,220	.76
Task-Oriented Measures				
Task Preoccupation	2.91	2.94	1,220	.05
Initiating Structure	3.33	3.27	1,220	1.21
Leadership Measure				
Role Assumption	3.32	3.30	1,220	.05

Scale = 1 to 5.
*$p < .05$

TABLE 14

Mean Scores and F-Values on Leader Questionnaire of Trained versus Untrained Sex-Typed Leaders

Subscales	Trained FF	Trained MM	Untrained FF	Untrained MM	Degrees of Freedom	F-Value
Socioemotional Measures						
Consideration	4.05	4.11	3.98	3.89	1,220	1.28
Integration	3.64	3.76	3.36	3.21	1,220	1.59
Eye Contact	3.80	4.00	3.60	3.81	1,213	.00
Verbal Behavior	3.40	3.40	3.25	3.31	1,213	.06
Aggressive Leadership	2.29	2.25	2.22	2.44	1,220	1.64
Task-Oriented Measures						
Task Preoccupation	2.98	3.01	2.89	2.82	1,220	.34
Initiating Structure	3.25 b	3.42 ab	3.29	3.24 a	1,220	4.23*
Leadership Measure						
Role Assumption	3.40	3.41	3.20	3.23	1,220	.01

Scale = 1 to 5.

Means with similar letters differed significantly, $p < .05$.

*$p < .05$

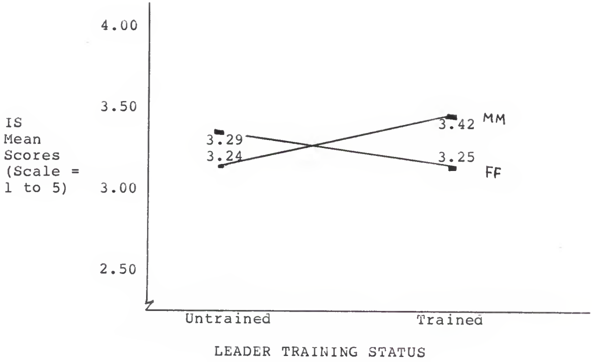

Figure 1: The Differences in Perceived Inititiating Structure (IS) Leadership Style of Trained versus Untrained Feminine Female (FF) and Masculine Male (MM) Leaders

Hypotheses Tested

The purpose of this set of analyses was to examine perceived differences in sex-typed leaders due to training. In general, it was expected that the training would increase the socioemotional behaviors of trained Masculine male leaders and the task-oiented behaviors of trained Feminine female leaders. Hypothesis 6 stated that trained Masculine male leaders would be perceived to have higher mean scores than their untrained counterparts on the socioemotional subscales. Contrary to expectation trained MM leaders scored higher than untrained MM leaders on Initiating Structure, a task-oriented measure, but not on any of the socioemotional subscales. Hypothesis 7 stated that trained Feminine female leaders would be perceived to have higher mean scores than their untrained counterparts on the task-oriented subscales. No differences were found.

Hypothesis 8 predicted that differences would be perceived in untrained sex-typed leaders in the direction of sex role stereotyping. Untrained Masculine male leaders would be perceived to have higher mean scores on task-oriented subscales while untrained Feminine female leaders would be perceived to have higher mean scores on socioemotional subscales. These differences were not expected to be found between the mean scores of trained sex-typed leaders. The hypothesis was not supported. Though expected, no differences were found between untrained sex-typed leaders on task or socioemotional scores. Contrary to expectation trained Masculine male leaders scored higher on the Initiating Structure subscale than trained Feminine female leaders.

Trained versus Untrained Sex-typed and Androgynous Leaders

This final set of analyses was performed to test similarity of trained sex-typed leaders and Androgynous leaders, and dissimilarity of those leaders to untrained sex-typed leaders. Two analyses were performed to compare perceptions of leader behavior and perceptions of group atmosphere and functioning.

A two-way Analysis of Variance was performed with two levels of role (leader and member) and six levels of leader type (trained FF, untrained FF, trained MM, untrained MM, Androgynous females, and Androgynous males) as the independent variables on the GAQ and GPFS completed by both leaders and group members. As in the previous analyses, the mean scores on the overall GAQ and on the four GPFS subscales were the dependent measures. A one-way Analysis of Variance was performed with six levels of leader type (trained FF, untrained FF, trained MM, untrained MM, AF, and AM) as the independent variables of the Leader Questionnaire, using the mean scores on the eight LQ subscales as the dependent variables.

Group Measures

GAQ. A two-way Analysis of Variance was performed on the mean score on the GAQ (n=401) with the six levels of leader type. The overall GAQ means are presented in Table 15 detailing the socioemotional group measures. Results indicated a main effect for leader types, $F(5,389) = 2.44$, $p < .05$, indicating there were significant differences in the perceptions of group atmosphere in the groups led by trained FF, untrained FF, trained MM, untrained MM, AF, and AM leaders. A post hoc analysis was performed using Duncan's Multiple Range test. The means for these comparisons are illustrated in Table 16. This indicated that groups led by trained FF were significantly different than any untrained groups, including the groups led by androgynous leaders. However, trained FF groups were not perceived to differ in group atmosphere from groups led by trained MM leaders. The groups led by trained MM leaders differed significantly from groups led by untrained MM leaders and groups led by AF leaders. No other comparisons were significant.

GPFS. A two-way Analysis of Variance was performed on the four subscales on the GPFS (n=402) with the six levels of leader type. The means for the socioemotional subscales are presented in Table 15 and the means for the task-oriented subscales are presented in 17. Main effects for leader type (trained FF, untrained FF, trained MM, untrained MM, AF, and AM leaders) were found on all four subscales, indicating significant differences were perceived in these groups for Cohesiveness, $F(5,390) = 3.14$, $p < .01$, for Socioemotional Group Process, $F(5,390) = 2.53$, $p < .05$, for Task Processing, $F(5,390) = 5.86$, $p < .001$, and for Group Productivity, $F(5,390) = 2.87$, $p < .05$. The results of the post hoc analyses, using Duncan's Multiple Range test, are reported in Tables 18, 19, 20, and 21 for each of the four subscales. As in the case of the GAQ, groups led by trained

TABLE 15

Mean Scores and F-Values on Socioemotional Group Measures for All Groups

Leader Types	GAQ Overall Mean	GPFS Subscale Means Cohesiveness	GPFS Subscale Means Socioemotional Group Process
Trained MM	6.68	4.13	4.17
Trained FF	6.90	4.18	4.07
Untrained MM	6.12	3.88	3.92
Untrained FF	6.39	3.66	3.85
Untrained AM	6.45	3.86	3.83
Untrained AF	6.04	3.74	3.88
Degrees of Freedom	5,389	5,390	5,390
F-Value	2.44*	3.14**	2.53*

Scale values for GAQ = 1 to 8.
Scale values for GPFS = 1 to 5.
Significant simple effects tests are reported in Tables 16, 18, and 19.
$^{*}p < .05$
$^{**}p < .01$
$^{***}p < .001$

MM and trained FF leaders received consistently high scores on all subscales.

TABLE 16

Mean Scores on the Group Atmosphere Questionnaire

Leader Type	Mean Score	Significant Comparisons*		
Trained FF	6.90	A		
Trained MM	6.68	A		C
AM	6.45		B	C
Untrained FF	6.39		B	C
Untrained MM	6.12		B	
AF	6.04		B	

*Means with similar letters in the comparison column do not differ significantly.
**Scale = 1 to 5
*** $p <.05$

In addition, a main effect was found for role on the Cohesiveness subscale, F(1,390) =20.33, $p < .001$ (see Table 22). An analysis of the means indicated that leaders perceived more Cohesiveness (mean = 4.22) than members did (mean = 3.81). No other main effects or interactions were found on the Group Process and Functioning Scale.

TABLE 17

Mean Scores and F-Values on Task-Oriented Group Measures for All Groups

Leader Types	GPFS Task-Oriented Subscale Means	
	Task Processing	Group Productivity
Trained MM	4.11	3.96
Trained FF	4.06	3.90
Untrained MM	3.48	3.36
Untrained FF	3.59	3.62
Untrained AM	3.77	3.66
Untrained AF	3.54	3.33
Degrees of Freedom	5,390	5,390
F-Value	5.86***	2.87*

Scale values for GPFS = 1 to 5.
Significant simple effects tests are reported in Tables 20 and 21.
*$p < .05$
**$p < .01$
***$p < .001$

TABLE 18

Means on GPFS Task Processing Subscale

Leader Type	Subscale Mean	Significant Comparisons*		
Trained MM	4.11	A		
Trained FF	4.06	A		
AM	3.77		B	
Untrained FF	3.59		B	C
AF	3.54		B	C
Untrained MM	3.48			C

*Means with similar letters in the comparison column do not differ significantly

**Scale = 1 to 5

*** $p < .05$.

TABLE 19

Means on GPFS Group Productivity Subscale

Leader Type	Subscale Mean	Significant Comparisons*			
Trained MM	3.96	A			
Trained FF	3.90	A	B		
AM	3.66	A	B	C	
Untrained FF	3.62		B	C	D
Untrained MM	3.36			C	D
AF	3.33				D

*Means with similar letters in the comparison column do not differ significantly

**Scale = 1 to 5

*** $p < .05$.

TABLE 20

Means on GPFS Cohesiveness Subscale

Leader Type	Subscale Mean	Significant Comparisons*	
Trained FF	4.18	A	
Trained MM	4.13	A	
Untrained MM	3.88		B
AM	3.86		B
AF	3.74		B
Untrained FF	3.66		B

*Means with similar letters in the comparison column do not differ significantly.
**Scale = 1 to 5
*** $p < .05$.

TABLE 21

Means on Socioemotional Group Process Subscale

Leader Type	Subscale Mean	Significant Comparisons*		
Trained MM	4.17	A		
Trained FF	4.07	A	B	
Untrained MM	3.92		B	C
AF	3.88		B	C
Untrained FF	3.85		B	C
AM	3.83			C

*Means with similar letters in the comparison column do not differ significntly.
**Scale = 1 to 5
*** $p < .05$.

TABLE 22

Mean Scores and F-Values on Group Measures of Members versus Leaders in All Groups

Subscales	Leaders' Mean Scores	Members' Mean Scores	Degrees of Freedom	F-Value
Socioemotional Measures				
GAQ	6.60	6.38	1,389	2.61
GPFS Cohesiveness	4.23	3.83	1,390	20.33***
GPFS Socioemotional Group Process	4.07	3.92	1,390	3.72
Task-Oriented Measures				
GPFS Task Processing	3.83	3.74	1,390	1.15
GPFS Group Productivity	3.61	3.73	1,390	1.18

Scale of GAQ items = 1 to 8.
Scale of GPFS items = 1 to 5.
*$p < .05$
**$p < .01$
***$p < .001$

Leader Questionnaire

A one-way Analysis of Variance was performed on the mean scores of the eight subscales of the Leader Questionnaire (n=319) assessing group members' perceptions of leader behavior in the six leader types (trained FF, untrained FF, trained MM, untrained MM, AF, and AM leaders). The means for the task-oriented subscales are presented in Table 23 and the means for the socioemotional subscales are presented in Table 24. The means for leadership Role Assumption are included on table 23. Main effects were found on five of the subscales. Leaders were perceived to differ significantly on two task-oriented subscales of the Leader Questionnaire. They differed on Initiating Structure, $F(5,313) = 3.26$, $p < .01$ and on Task Preoccupation, $F(5,313) = 3.05$, $p < .05$. Leaders were also perceived to differ significantly on two socioemotional subscales. They differed on Integration, $F(5,313) = 3.68$, $p < .01$, and on Consideration, $F(5,313) = 2.82$, $p < .05$. Leaders were also perceived to differ on the leadership Role Assumption subscale, $F(5,313) = 2.27$, $p < .05$. Duncan's Multiple Range tests were used for post hoc analyses. The mean scores for these five subscales are reported in Tables 25, 26, 27, 28, and 29, illustrating where the significant differences were perceived. Comparisons revealed that on all but one subscale (IS) all four untrained leaders (untrained FF, untrained MM, AF, and AM) were not perceived to differ significantly. Untrained FF were perceived to show more Initiating Structure than the untrained MM, AF, or AM leaders.

Comparisons of trained FF leaders to other leaders on these five subscales indicated that they did not differ significantly from untrained FF leaders on any subscales and

TABLE 23

Mean Scores and F-Values on Socioemotional Measures on the Leader Questionnaire for All Groups

Leader Types	Leadership Role Assumption	Task-Oriented Task Preoccupation	 Initiating Structure
Trained MM	3.41	3.01	3.42
Trained FF	3.40	2.98	3.25
Untrained MM	3.22	2.82	3.24
Untrained FF	3.20	2.89	3.29
Untrained AM	2.98	2.62	3.11
Untrained AF	3.23	2.63	3.21
Degrees of Freedom	5,313	5,313	5,313
F-Value	2.27*	3.05*	3.26**

Scale values for LQ = 1 to 5.

Significant simple effects tests are reported in Tables 25, 26, and 29.

*$p < .05$
**$p < .01$
***$p < .001$

only differed on one subscale from AF leaders. Trained FF leaders were perceived to show more Task Preoccupation than AF leaders.

TABLE 24

Mean Scores and F-Values on Task-Oriented Measures on the Leader Questionnaire for All Groups

Leader Types	LQ Socioemotional Subscale Means				
	C	I	EC	VB	AL
Trained MM	4.11	3.76	4.00	3.40	2.25
Trained FF	4.05	3.63	3.80	3.40	2.29
Untrained MM	3.89	3.21	3.81	3.31	2.44
Untrained FF	3.98	3.36	3.60	3.25	2.22
Untrained AM	3.80	3.22	3.49	3.14	2.09
Untrained AF	3.89	3.32	3.77	3.42	2.47
Degrees of Freedom	5,313	5,313	5,304	5,304	5,313
F-Value	2.82*	3.68**	2.04	.61	1.61

Scale values for LQ = 1 to 5.

Significant simple effects tests are reported in Tables 27 and 28.

*$p < .05$
**$p < .01$
***$p < .001$

Comparisons of trained MM leaders to other leaders on these five subscales indicated they differed from AM leaders on all subscales. Trained MM leaders were perceived to show more Initiating Structure, Task Preoccupation, Integration, Consideration, and Role Assumption than AM leaders. Trained MM leaders were also perceived to show more Integration and Consideration than untrained MM leaders.

The results on the Initiating Structure subscale varied the most from the other subscales, indicating trained MM leaders were perceived to show more Initiating Structure than all other leaders except untrained FF leaders.

TABLE 25

Mean Scores on the LQ Initiating Structure Subscale

Leader Type	Subscale Mean	Significant Comparisons*		
Trained MM	3.42	A		
Untrained FF	3.29	A	B	
Trained FF	3.25		B	C
Untrained MM	3.24		B	C
AF	3.21		B	C
AM	3.11			C

*Means with similar letters in the comparison column do not differ significantly

**Scale = 1 to 5

*** $p < .05$

TABLE 26

Mean Scores on the LQ Task Preoccupation Subscale

Leader Type	Subscale Mean	Significant Comparisons*	
Trained MM	3.01	A	
Trained FF	2.98	A	
Untrained FF	2.89	A	B
Untrained MM	2.82	A	B
AF	2.63		B
AM	2.62		B

*Means with similar letters in the comparison column do not differ significantly

**Scale = 1 to 5

*** $p < .05$.

TABLE 27

Mean Scores on the LQ Integration Subscale

Leader Type	Subscale Mean	Significant Comparisons*		
Trained MM	3.76	A		
Trained FF	3.63	A	B	
Untrained FF	3.36		B	C
AF	3.32		B	C
AM	3.22			C
Untrained MM	3.21			C

*Means with similar letters in the comparison column do not differ significantly

**Scale = 1 to 5

*** $p < .05$

TABLE 28

Mean Scores on the LQ Consideration Subscale

Leader Type	Subscale Mean	Significant Comparisons*		
Trained MM	4.11	A		
Trained FF	4.05	A	B	
Untrained FF	3.98	A	B	C
AF	3.93	A	B	C
Untrained MM	3.89		B	C
AM	3.80			C

*Means with similar letters in the comparison column do not differ significantly
**Scale = 1 to 5
*** $p < .05$.

TABLE 29

Mean Scores on the LQ Role Assumption Subscale

Leader Type	Subscale Mean	Significant Comparisons*	
Trained MM	3.41	A	
Trained FF	3.40	A	
AF	3.23	A	B
Untrained MM	3.22	A	B
Untrained FF	3.20	A	B
AM	2.98		B

*Means with similar letters in the comparison column do not differ significantly
**Scale = 1 to 5
*** $p < .05$.

Hypotheses Tested

The purpose of this set of analyses was to examine perceived differences in all leaders used in the current study to lend further support for the hypotheses evaluated in the first two sets of analyses. Furthermore, these analyses were the only ones that compared all group leaders simultaneously, allowing for comparisons of trained sex-typed leaders and Androgynous leaders which was not possible in the previous analyses. Two sets of analyses were performed to compare all leaders on the task and socioemotional variables contained on the leader questionnaire and on the group measures of group atmosphere and task and socioemotional group functioning.

The results relevant to the eight hypotheses tested in the preceeding analyses will be presented, followed by a discussion of two hypotheses tested only by the analyses in the present section. The first hypothesis proposed that untrained MM leaders would be rated significantly higher than untrained FF leaders on task-oriented measures. Similar to the previous analyses, no differences were found.

The second hypothesis proposed that untrained FF leaders would be rated significantly higher than untrained MM leaders on socioemotional measures. Similar to the previous analyses no differences were found.

Third, no differences were expected when comparing untrained Androgynous male and female leaders. One task-oriented difference emerged. Groups led by untrained Androgynous male leaders were perceived to be more productive than groups led by untrained Androgynous female leaders which had the lowest mean productivity rating of all six leader types. This effect was not found on the previous analysis comparing the untrained Androgynous group leaders. In the earlier analyses untrained Androgynous male leaders were also rated to be less aggressive than untrained Androgynous female leaders.

Fourth, untrained Androgynous leaders were not expected to differ significantly from untrained Masculine male leaders on task-oriented measures, but would differ on socioemotional measures. Contrary to expectation, untrained Androgynous male leaders were perceived to have higher task processing than untrained Masculine male leaders. The previous analyses reported that untrained Androgynous male leaders were perceived to be less aggressive than untrained Masculine male leaders.

Fifth, untrained Androgynous female leaders were expected to be rated higher on task-oriented measures than untrained Feminine female leaders, but would not differ on socioemotional measures. Similar to the previous analyses, no differences were found.

Differences were also expected when comparing the untrained sex-typed leaders to the trained sex-typed leaders of the same sex. There were several significant differences found when comparing untrained sex-typed leaders to their trained sex-typed counterparts. Hypothesis 6 stated that trained Masculine male leaders would score higher than untrained Masculine male leaders on the socioemotional subscales. The analyses in this section showed that trained Masculine male leaders significantly differed from untrained Masculine male leaders on five socioemotional measures and three task-oriented measures. They were rated higher on Consideration, Integration, Socioemotional Group Process, group Cohesiveness, and positive Group Atmosphere, as well as on group Task Processing, Group Productivity, and Initiating Structure. The results of the latter subscale were also found on the previous analyses.

Hypothesis 7 stated that trained Feminine female leaders would score higher than their untrained counterparts on the task-oriented subscales. Trained Feminine female leaders scored higher on one task-oriented measure, group Task Processing, and on two socioemotional measures, group Cohesiveness and positive Group Atmosphere, than untrained Feminine female leaders. Previous analyses had not shown any differences.

Hypothesis 8 predicted differences in the direction of sex-role stereotyping for untrained sex-typed leaders, but no differences when comparing trained sex-typed male and female leaders. The results found in this analysis were similar to that found previously: contrary to expectation, trained Masculine male leaders were rated more highly on one task measure, Initiating Structure, than were trained Feminine female leaders. No other differences were found.

The most significant analyses performed in this section compared trained sex-typed leaders with the untrained Androgynous leaders. This comparison was not possible on the previous two sets of analyses. Hypothesis 9 stated that no differences were expected when comparing trained Feminine female leaders with untrained Androgynous female leaders. Hypothesis 10 proposed that differences would not be found when comparing trained Masculine male leaders with untrained Androgynous male leaders. However, there were substantial differences indicating that trained Feminine female and Masculine male leaders were perceived more positively than their untrained Androgynous counterparts.

Trained Feminine female leaders differed significantly on two socioemotional and three task-oriented measures from the untrained Androgynous female leaders. The trained Feminine female leaders were rated higher on Group Atmosphere, group Cohesiveness, group Task Processing, Group Productivity, and Task Preoccupation.

Even more significant were the differences found between trained Masculine male leaders and untrained Androgynous male leaders. Significant differences were found on five socioemotional measures, four task-oriented measures, and on the leadership role assumption measure. Trained Masculine male leaders were rated higher on the socioemotional measures of Group Atmosphere, group Cohesiveness, Socioemotional Group Process, Integration and Consideration leadership styles. They were also rated higher on the task-oriented measures of Task Productivity and Initiating Structure leadership style. Lastly they were rated higher on leadership Role Assumption. Instead of finding no differences between trained sex-typed leaders and their untrained androgynous counterparts, there was substantial evidence that the groups of trained male and female sex-typed leaders had higher task and socioemotional functioning than did their untrained Androgynous counterparts.

Summary of Hypotheses and Results

(1) Hypothesis 1: Untrained MM leaders would be rated significantly higher than untrained FF leaders on task-oriented measures. No differences were found to support this prediction.

(2) Hypothesis 2: Untrained FF leaders would be rated significantly higher than untrained MM leaders on socioemotional measures. No differences were found to support this prediction.

(3) Hypothesis 3: No differences were expected to be perceived between untrained AF and untrained AM leaders on task and socioemotional measures. Contrary to expectation Androgynous male leaders used a less

aggressive leadership style and had higher ratings of group productivity than did Androgynous female leaders.

(4) Hypothesis 4: Untrained Androgynous leaders would not differ from untrained MM leaders on task-oriented measures, but would differ on socioemotional measures. Contrary to expectation untrained AM leaders were rated higher than untrained MM leaders on the task-oriented measure of task processing. No differences were found on socioemotional measures.

(5) Hypothesis 5: Untrained Androgynous leaders would not differ from untrained FF leaders on socioemotional measures, but would differ on task-oriented measures. No differences were found.

(6) Hypothesis 6: Trained MM leaders would be rated significantly higher than untrained MM leaders on socioemotional measures. As predicted, trained MM leaders were rated higher on five socioemotional measures. Although not predicted, trained MM leaders were also rated higher on three task-oriented measures.

(7) Hypothesis 7: Trained FF leaders would be rated significantly higher than untrained FF leaders on task-oriented measures. As predicted, trained FF leaders were rated higher on one task-oriented measure. Although not predicted, trained FF leaders were also rated higher on two socioemotional measures.

(8) Hypothesis 8: Untrained MM leaders would be rated higher on task-oriented variables while untrained FF leaders would be rated higher on socioemotional variables. No differences were expected to be found on these variables when comparing trained MM and FF leaders. Contrary to expectations no differences were found between untrained FF and MM leaders. Also, contrary to the expectation trained MM leaders were rated higher on the task-oriented measure of Initiating Structure than were trained FF leaders.

(9) Hypothesis 9: No differences on task or socioemotional measures were expected when comparing trained FF leaders with untrained AF leaders. Contrary to expectation differences were found indicating that trained FF leaders were rated higher on socioemotional and task-oriented measures than untrained AF.

(10) Hypothesis 10: No differences on task or socioemotional measures were expected when comparing trained MM leaders with untrained AM leaders. Contrary to expectations, differences were found supporting that trained MM leaders were rated higher on socioemotional, task-oriented, and leadership role assumption measures than untrained AM.

CHAPTER V
DISCUSSION

Comparisons of Untrained Sex-typed Leaders

The first two hypotheses of this study examined differences between untrained sex-typed male and female leaders to determine if these leaders would be perceived according to traditional sex role stereotypes. Comparisons were made on task and socioemotional measures of the leaders' behavior and on measures of the group task processing and socioemotional relations. The choice to measure the dimensions of task-orientation and socioemotional relations was based on previous research which indicated that males were perceived to behave in more task-oriented ways while females were perceived to behave in more socioemotional ways (Parsons, 1955; Rosen & Jerdee, 1974a, 1974b; Bartol & Butterfield, 1976; Petty & Miles, 1976; Piliavin & Martin, 1978; Baird & Bradley, 1979; Flaherty & Dusek, 1980). Two hypotheses were generated to address the differences in task and socioemotional behaviors. On the first hypothesis it was expected that untrained Masculine male leaders would be rated higher on the task measures than untrained Feminine female leaders. On the second hypothesis is was expected that untrained

Feminine female leaders would be rated higher on the socioemotional measures than untrained Masculine male leaders.

Contrary to what was anticipated on both hypotheses, the results of this study did not show that leaders were perceived according to traditional sex role stereotypes. No differences were found between untrained sex-typed leaders on any measure of task or socioemotional functioning. The lack of perceived differences between male and female sex-typed leaders was more supportive of the literature that has claimed no differences in leadership style due to gender (Day & Stogdill, 1972; Martin, 1972; Miner, 1974; Price, 1974; Rousell, 1974; Wexley & Hunt, 1974; Bartol & Wortman, 1976; Bedeian et al., 1976; Lockheed & Hall, 1976; Osborn & Vicars, 1976; Butterfield & Powell, 1977; Lee & Alvares, 1977; Petty et al., 1977; Petty & Bruning, 1980). The use of sex-typing did not seem to offer any more predictive utility than gender in evaluating differences in leadership.

Despite the proportion of studies which had indicated a lack of sex differences this study was expected to show differences for several reasons. There were several contingency variables discussed in the literature which have been found to increase perceptions of sex role stereotyping behavior. Previous research has indicated that sex role stereotyping was more likely to occur in mixed-sex groups (Parsons, 1955; Megargee, 1969; Piliavin & Martin, 1978), in ambiguous task situations (Maier, 1970), when using young or inexperienced workers such as a student population (Bowman et al., 1965; Deaux, 1976; Brown, 1979), and when using sex-typing rather than gender as the manipulated variable (Powell & Inderlied, 1979; Orlofsky & Stake, 1981).

This research used mixed-sex groups during the experimental task. Piliavin and Martin (1978) observed mixed-sex groups and found that females engaged in higher levels of socioemotional behaviors while males engaged in higher levels of task behaviors. Females were not found to suppress their task-oriented behaviors, but did not match the level of task behavior recorded for males. Similar support for mixed-sex groups enhancing the differences between male and female leaders in their task and socioemotional behavior was found in Parsons (1955). Two shortcomings may indicate why this particular variable may not have produced a similar impact in this study. First, the study by Parsons (1955) was done practically thirty years ago. There have been many cultural changes since then resulting in an increase of women in leadership roles. The changing standards have made it more acceptable for women to demonstrate leadership behaviors. However, as recently as 1978 Piliavin and Martin replicated those results. While Piliavin and Martin reported large differences in task and socioemotional behaviors between male and female leaders, they also added that females were not inhibiting or reducing their task behavior when they led a mixed-sex group as opposed to an homogenous female group. Group composition was not manipulated in the current study. Thus it is difficult to assess the actual difference a mixed-sex group versus a homogeneous group would have on perceived differences in highly sex-typed leaders. However, based on the results of the current study, there is no support that male and female leaders were perceived to behave in more traditional stereotyped patterns while leading mixed-sex groups.

Increased sex role stereotyped behavior has been observed in ambiguous versus structured situations (Maier, 1970). Also, ratings of Consideration and Initiating Structure styles of leadership have been higher in ambiguous as compared to structured situations (Miller, 1973; Badin, 1974). Green, Nebeker, and Boni (1976) found that task-oriented leaders increased task-oriented behaviors and socioemotional leaders increased socioemotional behaviors in an ambiguous situation. Male leadership style has been associated with Initiating Structure and female leadership has been associated with Consideration (Parsons, 1955; Bartol & Butterfield, 1976; Petty & Miles, 1976; Piliavin & Martin, 1978; Baird & Bradley, 1979). It would be expected that male Initiating Structure scores and female Consideration scores would be inflated and differ to a greater extent in ambiguous situations. This did not appear in the present study. However, Abdel-Halim (1981) found that task complexity interacts with task ambiguity. In high ambiguous - high task complexity situations, Initiating Structure would be more favorable while in high ambiguous - low task complexity situations Consideration would be more favorable. Since the current study uses a high ambiguous-low complexity situation, Consideration styles might be increased by male and female leaders, diminishing the chance of perceived differences. Without the manipulation of these variables, it is difficult to specify the impact these factors have on sex-typed leadership.

Another variable that has indicated sex differences has been age or lack of employed experience of the subjects used in the research, particularly when using a student population. Several studies have noted discrepancies when comparing results based on students versus employees (Bowman et al., 1965; Deaux, 1976; Brown, 1979). The general attitude has been that traditional sex role stereotyping is more likely to occur when using a young, inexperienced, student population. While the current research used a student population and thus increased the chance of observing sex role differences, the results obtained in this study do not support that students perceived sex role stereotyped behavior in leadership evaluations. These results are compatible with a few other studies which have indicated no sex differences in leadership style using a student population (Bartol, 1974; Wexley & Hunt, 1974; Lockheed & Hall, 1976).

One last critical variable, sex-typing, has been hypothesized to discriminate sex differences more clearly. Sex role identity has been defined as the degree to which a person describes him/herself in varying degrees of possessing traditional masculine and feminine traits. Traditional masculine traits have represented instrumental behavior while traditional feminine traits have represented expressive traits (Rosenkrantz et al., 1968). Individuals have been found to vary in the degree to which they ascribe to the traditional beliefs characteristic of their sex (Bem, 1974; Spence et al., 1975). The more a person has ascribed to the traditional stereotyped traits of their sex, the more sex-typed they have been considered to be. Sex-typed individuals suppressed those behaviors antithetical to the sex role stereotype of their gender (Bem, 1975; Bem & Lenney, 1976; Bem, Martyna, & Watson, 1976; Jones et al., 1978, Worell, 1978; Flaherty & Dusek, 1980). Suppression of cross-sex behaviors is explained by the motivation to maintain consistency between self concept and behavior (Bem, 1974). Thus, highly sex-typed individuals would show restricted use of the cross-sex behaviors considered necessary for ideal leader behavior. The ideal leader has been described as one who uses both instrumental and expressive traits to mobilize the work group and achieve the task (McClelland, 1965; Powell & Butterfield, 1969; O'Leary, 1974; Schein, 1973, 1975). Flaherty and Dusek (1980) indicated that Feminine female and Androgynous subjects scored higher on socioemotional measures and Masculine males and Androgynous subjects scored higher on instrumental measures. Differences should be found in the leadership behavior of sex-typed leaders especially on task and socioemotional measures. Thus it was assumed that sex-typing would be a better predictor of leadership behavior than gender alone since gender doesn't account for the degree to which an individual ascribes to traditional masculine and feminine traits. Sex-typing was viewed as a variable that would accentuate sex role stereotyped behavior more so than gender had indicated. Several studies have supported that sex-typing was a better predictor of strivings and leadership behavior than gender (Inderlied & Powell, 1979; Flaherty & Dusek, 1980; Orlofsky & Stake, 1981). While those studies indicated that Feminine female leaders would be rated higher on socioemotional measures than Masculine male leaders, and the opposite difference would occur when comparing task-oriented measures, the results of the current study did not indicate any differences on any measures of task and socioemotional behavior.

The role of four contingency variables has been discussed above. In addition the role of the experimental task and performance cues should be considered when examining the comparisons of untrained sex-typed leaders.

The experiment was brief, lasting only 45 minutes. The brevity of time spent together may not have given subordinates adequate time to perceive differences in leadership style. Since the groups were told that they would not be able to complete the the task, they all received a consistent cue about the outcome of their performance. Given the brief time spent together, this performance cue may have generally inflated all scores. Cues regarding the success or failure of a task have been found to alter perceptions of leader behavior (Mitchell et al., 1977; Rush et al., 1977; Lord et al., 1978). However, if all groups had inflated their scores due to the success performance cue a ceiling effect would have occurred. Since the general evaluations of trained sex-typed leaders were much greater than those given to untrained group leaders, a ceiling effect was not witnessed on the evaluations given to the untrained sex-typed or androgynous leaders.

In review of this section, the demonstration of sex role stereotyped behavior by untrained sex-typed leaders was not found. Despite the number of variables that were expected to promote stereotyped behavior, with the possibility that some factors may have obscured differences, this study must be listed among those studies which do not demonstrate sex-related differences in task and socioemotional leadership when using sex-typed leaders.

Comparisons of Androgynous Male and Female Leaders

Androgynous leaders have been found to be more flexible in their behavioral repertoire (Bem, 1975; Bem & Lenney, 1976; Bem et al., 1976) and more able to express both expressive and instrumental behaviors (Kelly et al., 1976; Flaherty & Dusek, 1980; Kelly et al., 1981). The third hypothesis of this study suggested that comparisons made on task and socioemotional measures of androgynous leaders' behavior and group process were not expected to differ significantly. Both male and female androgynous leaders were expected to be rated equally high in both dimensions. However, the results showed that Androgynous male leaders were more task-oriented and used a less aggressive leadership style than Androgynous female leaders. Specific items on the subscales that showed significant differences indicated that Androgynous male leaders had groups that were rated as being more organized and productive than Androgynous female groups; they were also rated as being less aggressive in getting their way and less likely to make all the decisions in the group.

These results could imply several things. Androgynous female leaders were found to have described masculine traits to be as self-descriptive as feminine traits on the screening measure (BSRI). Thus, they may have been classified as Androgynous, but they may have desired to possess masculine traits more than they actually demonstrated them in their behavior. The desirability of masculine traits has been well documented. Jones et al. (1978) found that Feminine females expressed the greatest desire to change in the direction of masculinity; Feminine males and Androgynous males expressed a similar desire to become more masculine. Masculine males and Androgynous females expressed the least desire to change. The more masculine the subjects' orientation was the less change was desired and the more adaptive and competent they were judged to be. Other research has indicated that Masculine subjects were as adjusted, competent, and high in self-esteem as Androgynous subjects (Spence et al., 1975; Bem, 1977; Orlofsky, 1977; Silvern & Ryan, 1979). There has been strong support for the social appropriateness of masculine items as opposed to feminine items (Broverman et al., 1970; Maccoby & Jacklin, 1974). It appears that society devalues feminine behaviors and produces a desire to become more masculine. Thus, Andogynous female leaders may have preferred the masculine traits on the pre-screening measure, but may not have been able to perform the masculine traits to the same extent they were desired.

If the female leaders were perceived to be more aggressive, perhaps their conception of leadership is one in which the leader is directive and aggressive. On the other hand, perhaps their behavior was not dissimilar to that of the Androgynous male leaders, but subordinates interpreted the female leaders behavior to be more aggressive, possibly because they were seen as acting out of character for the female gender. Another interpretation is that Androgynous male leaders do include more socioemotional behaviors in their leadership style, contrary to what a person might expect in the standard masculine managerial model. While they might not have performed less aggressively, they might have been perceived to have acted in a less aggressive fashion due to the additional attention placed on socioemotional concerns. Subordinates may have been responding to these male leaders performing cross-sexed behaviors antithetical to what they expected of male leaders.

A final interpretation is, of course, that Androgynous male leaders really did behave less aggressively and were perceived accurately by their subordinates. An interesting phenomena occured during the leadership selection process that pertains to this issue. Every leader selected based on the prescreening results on the BSRI had the option to refuse the leadership role being offered. It was expected that Feminine females might decline the offer frequently, which did not occur even once during the selection process. However, between one third and one half of the Androgynous male leader candidates refused the leadership position. Their comments reflected that they did not feel they were an appropriate candidate to be a leader and were quite surprised to have been selected. While such a visual reaction occurred on the faces of many Feminine females, they nonetheless accepted the role. One possible explanation is that neither Feminine females nor Androgynous males felt they fit the traditional leader stereotype. However, while the females may have reluctantly agreed, reacting according to the passive female stereotype, the Androgynous males appeared to be assertive enough to voice their discomfort. In sum, contrary to the stated hypothesis, partial support was found for a difference in androgynous male and female leaders.

Comparisons of Androgynous and Untrained Sex-typed Leaders

An additional two hypotheses were included to make comparisons of the untrained Androgynous leaders to the untrained sex-typed leaders. Hypothesis 4 stated that untrained Androgynous leaders would not differ from untrained Masculine male leaders on task measures, but would differ from the untrained Masculine male leaders on socioemotional measures. Hypothesis 5 stated that untrained Androgynous leaders would not differ from untrained Feminine female leaders on socioemotional measures, but would differ from those leaders on task measures. These findings would demonstrate that Androgynous leaders were flexible enough to demonstrate both types of behavior while untrained sex-typed leaders were more reluctant to do cross-sex behaviors.

Contrary to the stated hypotheses no differences were found on any task measure when comparing untrained Androgynous female leaders with untrained Feminine female leaders. No differences were found on socioemotional measures when comparing these leaders either. This seems to indicate that Androgynous females and Feminine females use similar leadership styles. While Androgynous female leaders ascribed to more masculine traits on the BSRI, their behavior was not found to differ from females who described themselves according to more feminine traits. This would follow the interpretation given earlier that Androgynous female leaders may desire to be more masculine and feel their self-concept includes more masculine traits, but they may not be perceived to demonstrate significantly more masculine, or task-oriented, behaviors.

Conflicting evidence was found for the hypothesis that untrained Androgynous male leaders would use more socioemotional behaviors than untrained sex-typed leaders. The Androgynous leaders were perceived to be less aggressive in their leadership style than untrained Masculine male leaders. However, no other differences were found on the other socioemotional measures of leadership style or group atmosphere. Furthermore, one other difference was perceived in an unanticipated direction. Untrained Androgynous leaders were rated higher on the group task-oriented measure of group processing than were the untrained masculine male leaders. Androgynous males appear to have a different leadership style. They are less aggressive than Masculine males and Androgynous females. The items on the aggressive leadership subscale indicate that Androgynous males were perceived to be less aggressive in getting their way and did not make most of the decisions for the group. They seemed to impose less of their own ideas, and rely more on the ideas and decision-making of the subordinates. This participative style of leadership has been reported to increase group satisfaction, member interaction, task motivation, and better decision-making, particularly in a task which requires creativity such as the one used in this study (Bass, 1981).

The leadership style of Androgynous males is consistent with the Managerial Grid model that promotes a high concern for involving the members as the best model for leadership. However, it would be difficult to determine from the current results whether Androgynous male leaders use a 9,9 style of leadership (high Initiating Structure, high Consideration) or a 1,9 style of leadership (low Initiating Structure, high Consideration). The means reported for Initiating Structure (see Table 7) indicated that untrained Androgynous male leaders did not differ significantly from other untrained leaders, but they were rated as having the lowest mean Initiating Structure score. This finding would suggest that Androgynous male leaders use a 1,9 style of leadership. In conclusion, contrary to the hypothesis promoted in this research, neither Androgynous male leaders nor Androgynous female leaders resemble the ideal leadership model which includes both high Initiating Structure and high Consideration behaviors. Androgynous males were low in Initiating Structure and Androgynous females did not differ from sex-typed female leaders.

Training Effects

Comparisons were made between the trained Feminine female and Masculine male leaders with their untrained counterparts to determine if training promoted the use of cross-sex behaviors in Feminine female and Masculine male leaders since both task-oriented and socioemotional behaviors are considered important for leadership.

While no hypotheses were generated about the effect of training in general, many significnt differences emerged suggesting that training was successful in increasing the use of both task-oriented and socioemotional behaviors in male and female sex-typed leaders, making them perform more similar to the ideal 9,9 leadership model. Trained leaders were rated higher than untrained leaders on all socioemotional leadership and group measures except Eye Contact, Verbal Behavior, and Aggressive Leadership. Trained leaders were rated higher on all group task-oriented measures; the leadership style task-oriented subscales were not significant, but were in the direction of higher ratings given to trained versus untrained leaders. Lastly, trained leaders were rated significantly higher on leadership role assumption. These results strongly suggest that a brief leadership training program can have a significant impact on increasing socioemotional and task-oriented measures of sex-typed leaders, making them more similar to the criteria for ideal leadership.

There was some support for the sixth hypothesis, anticipating that Feminine female leaders would be rated higher on task-oriented measures than their untrained counterparts. Trained Feminine female leaders were rated as having groups with higher task processing than untrained Feminine female leaders. No differences were expected between trained and untrained Feminine female leaders on socioemotional measures, since females in general have been found to be rated higher than males on socioemotional measures in past research (Parsons, 1955; Bartol & Butterfield, 1976; Petty & Miles, 1976; Piliavin & Martin, 1978; Baird & Bradley, 1979; Flaherty & Dusek, 1980). However, the results of this study indicated that training was effective in increasing the socioemotional success reported for the groups led by trained Feminine female leaders. The trained Feminine female leaders were rated as having more group cohesiveness and positive group atmosphere. Items on these subscales indicate their groups were perceived to be more coordinated, motivated to complete the task, able to solve problems, and confident in the group members' contributions than groups of untrained Feminine female leaders. The higher ratings on these items reflect some of the behavioral skills emphasized during training for Feminine females to learn. During training Feminine females practiced conflict resolution (Unit III of training described in Appendix G) and task clarification and coordination (Unit IV of training). It was hoped that this training provided to the Feminine females would increase their perceived task-oriented leadership style. While the ratings on the leadership evaluation did not support this anticipated increase in task-oriented leadership style due to training, the higher ratings on the group measures suggest the desired increase in task-orientation did occur (i.e., greater coordination, conflict resolution, and task processing). This is particularly important since females have been found to be less capable of group conflict resolution and task processing (Bartol & Wortman, 1975; Bartol & Butterfield, 1976; Sargent, 1977; Carr-Ruffino, 1982).

It may be that leader evaluations are more susceptible to sex role stereotyping than group evaluations. Subordinates may tend to rate their leader more according to sex role stereotypes, and thus not perceive Feminine female leaders as demonstrating high levels of task-oriented leadership style. However, when the subordinates focus on the general success of the group, they may perceive greater task success under female leadership than they perceived on the leader evaluation. It would thus be important to assess female leadership based on group measures more so than leader evaluations. This form of assessment seems to be more consistent with the traditional stereotype of female behavior as one that emphasizes group relations. Females may be more apt to attempt task needs through interpersonal channels than by being directive or centering attention on themselves as the leader.

The results of this study provide some support that Feminine female leaders can be trained to increase task-orientation of their groups, particularly through increased use of interpersonal skills (motivating members, increasing their confidence in each other, and helping members be more coordinated and able to solve problems).

The differences between trained and untrained Masculine male leaders indicated an even greater shift in leadership style due to training. As anticipated in Hypothesis 7, trained Masculine male leaders were rated higher on almost all measures of socioemotional leadership style and group functioning than untrained Masculine male leaders. Training was not expected to increase the task-oriented behavior of Masculine male leaders. However, the results of this study indicated that trained Masculine male leaders were also rated higher on almost all task-oriented measures than untrained Masculine male leaders. Trained Masculine male leaders were rated higher than untrained Masculine male leaders on all three socioemotional group measures and on the Consideration and Integration leadership style subscales. In addition, trained Masculine male leaders were rated higher on both of the task-oriented group measures and on the Initiating Structure leadership style subscale suggesting that Masculine male leaders improved their task-oriented behaviors as well as their socioemotional leadership style following the training experience. The training of this study appears to have altered the behavior of sex-typed male leaders to approximate the 9,9 ideal leadership model.

It was predicted that, following training, both Masculine males and Feminine females would approximate the ideal 9,9 ideal leadership model. Hypothesis 8 stated that no differences would be perceived in socioemotional or task-oriented measures between trained Feminine female and Masculine male leaders. While there was support for great similarity in the leadership style and group functioning of the trained sex-typed leaders, one difference emerged indicating that trained Feminine female leaders were rated lower on Initiating Structure leadership style than trained Masculine male leaders; no differences were found on socioemotional measures.

The results discussed earlier indicated that trained Masculine male leaders were rated higher on socioemotional measures than untrained Masculine male leaders. The results in this section indicated that trained Masculine male leaders were rated as high on socioemotional measures as trained Feminine female leaders. Together these results suggest that training was very effective in increasing the socioemotional orientation of Masculine male leaders. However, the difference in task-oriented leadership style indicated that trained Feminine female leaders were rated as using less Initiating Struture leadership style than trained Masculine male leaders. This appears to be a critical difference, since the ideal 9,9 leadership model includes a high Initiating Structure leadership style. Training was apparently less effective in changing Feminine females task-oriented leadership style than it was in changing Masculine males socioemotional leadership style. Again it may be a case where evaluations of leadership style are more subject to sex role stereotyping. The increased socioemotional ratings of trained Masculine males could also be caused by more external variables such as performance cues and increased satisfaction with group relations. Socioemotional measures have been found to be more susceptible to these external variables (Schriesheim et al., 1979).

Another factor could be an inadequacy of the training program. Feminine female and Masculine male leader trainees were exposed to all units of training. The focus was on increasing their cross-sex leadership style. The trainees were required to practice tasks on the units of training geared to promote their cross-sex behavior. However, they were also exposed to the importance of using both task-oriented and socioemotional leadership styles and were educated on ways to increase both. Perhaps training could be more effective for Feminine female leaders if they participated in a training program geared exclusively to the greater use of task-oriented behaviors. A more definitive way of assessing the impact of training on promoting the use of task-oriented leadership style in Feminine female leaders would be to isolate their training to education on cross-sex leadership behaviors.

Another speculation regarding the training effects is the consideration of the cognitive screen, or the perceptions of traditional sex role behavior, which each trainee possesses. If the material was learned in a sex role stereotyped fashion, Masculine male leaders would have interpreted socioemotional skills in a task-oriented manner, regarding the socioemotional skills as an aid to having a more productive group. Feminine female leaders would have interpreted task-oriented skills in a socioemotional manner, regarding the task-orientation as something that must be incorporated into the group process, not necessarily into their leadership behavior. Learning the training material in a sex role stereotyped manner would be reflected in increasd socioemotional leadership style ratings for Masculine male leaders and increased task-oriented group measures for Feminine female leaders. More specifically, the training effects for Masculine males would be reflected in the leadership evaluation while the training effects for Feminine females would be reflected in the group evaluations. The results obtained in this study are highly suggestive of that interpretation. The increase of socioemotional orientation for Masculine male leaders was observed on the leader evaluations. The increase in task-orientation for Feminine female leaders was observed on the group evaluations.

Comparisons of Trained Sex-typed and Untrained Androgynous Leaders

The last two hypotheses stated in the study involved comparisons of trained sex-typed leaders to untrained Androgynous leaders. No differences were expected since all four group leaders (trained FF, trained MM, untrained AF, and untrained AM) were expected to demonstrate high task and socioemotional functioning and use the ideal 9,9 leadership style.

Contrary to Hypothesis 9, trained Feminine female leaders differed from untrained Androgynous female leaders. They were rated higher on both socioemotional and task-oriented measures. Specifically, Feminine female leaders were rated higher on task processing, greater group productivity, and task preoccupation in their leadership style than untrained Androgynous female leaders. They were also rated to have a more positive group atmosphere and greater cohesiveness than untrained Androgynous female leaders.

These results support the use of training for females to increase overall leadership skills toward matching the 9,9 leadership style. These results also suggest that Feminine female leaders were successful in increasing the task-orientation of their groups, and in being perceived to be more preoccupied with the task although their task-oriented leadership style did not show a significant difference.

The last hypothesis anticipated a similarity of ratings on task-oriented and socioemotional measures for trained Masculine male and Androgynous male leaders. Contrary to that expectation, many differences were found indicating trained Masculine male leaders were rated higher on almost all socioemotional and task-oriented measures. Masculine male leaders were rated as having a more positive group atmosphere, a more cohesive group, more socioemotional group processing, and a more socioemotional leadership style (higher ratings of Consideration and Integration). Not only do these differences support the use of training to increase the socioemotional leadership style of male leaders, the results also indicate that untrained Androgynous male leaders do not match the ideal 9,9 leadership style which has been termed to be an androgynous model of leadership (Sargent, 1981; Garen, 1982). Perhaps that terminology is a misnomer.

In addition to the differences found in socioemotional performance, trained Masculine male leaders were also rated as having a greater task-oriented leadership style (higher ratings on Initiating and Task Preoccupation), greater task processing in their groups, and higher ratings of leadership role assumption than untrained Androgynous male leaders. These results lend further support that Masculine male leaders are more similar to the ideal 9,9 leadership style following training.

Additional Findings

Sex-typing Differences

Two additional findings emerged that were not hypothesized. In the comparison of trained and untrained sex-typed leaders a main effect was found for sex-typing indicating the groups of Feminine female leaders, regardless of whether or not they received training, were rated as having a more positive group atmosphere than Masculine male leaders. This finding suggests that females place greater emphasis on group relations than on their leadership performance.

Comparison of Leader and Member Perceptions

The other finding that emerged concerned differences between leaders and group members in their evaluation of group atmosphere and cohesiveness. In all sets of analyses leaders rated their groups higher in cohesiveness than members did. Also, in the analyses that compared all untrained leaders (untrained FF, untrained MM, untrained AF, and untrained AM) leaders rated their groups higher in overall group atmosphere than members did. Graham and Gleno (1970) have cautioned against collapsing leader and subordinate perceptions on leader evaluations. The way leaders perceived their own behavior was found to be at variance with how subordinates perceived their leader's behavior. While leader perceptions were not made on the Leader Questionnaire for the current study, it was decided to use both leader and member perceptions on the group measures. Fiedler (1967) originally designed the Group Atmosphere Questionnaire (GAQ) to assess leader perceptions of the group atmosphere. Rice et al. (1980) found that leader and member perceptions on the GAQ were correlated .56 on structured tasks, but only correlated .15 on unstructured tasks. Since the current design used an experimental task that was more unstructured, the correlations of leaders and members would be expected to be lower. This appears to be the case on socioemotional measure of group performance, but not on measures of group task functioning. The significant findings on the socioemotional group measures must be interpreted with caution in light of these findings.

Implications

A summary of the three stated goals of this study indicates that, contrary to expectations, sex role stereotyping was not found in perceptions of sex-typed leaders and that untrained Androgynous leaders were not perceived to demonstrate the model leadership pattern of both task and socioemotional functioning. However, training did have a significant effect with sex-typed males in particular demonstrating the ability to learn socioemotional skills. Sex-typed femlaes did not as readily learn task-oriented leadership styles, though their group functioning ratings reflected a greater task-oriented emphasis.

There are several implications from this study. The variable of sex role orientation does not appear to offer more predictive utility than gender in ferreting out gender related differences in leadership style. It failed to discriminate differences in untrained sex-typed leaders as had been found by Inderlied and Powell (1979).

Secondly, while androgyny has been suggested as an ideal model of leadership (Larwood & Wood, 1977; Sargent, 1981; Garen, 1982) a difference exists between an androgynous self-description as measured by the BSRI and a desired leadership style of high concern for both production and people. While Androgynous individuals are reported to be more flexible in use of both feminine and masculine behaviors (Bem, 1975; Bem & Lenney, 1976; Bem et al., 1976) and to be able to be both expressive and instrumental (Kelly et al., 1976; Campbell et al., 1981; Kelly et al., 1981) this study did not find that Androgynous subjects actually demonstrate higher levels of both behaviors than sex-typed individuals during a given task where high levels of both were desired. The current study supported previous research which showed that Androgynous individuals were as expressive as Feminine females and as instrumental as Masculine males (Major et al., 1981; Orlofsky & Stake, 1981). However, Androgynous leaders did not engage in cross-sex behaviors to a significantly greater extent than sex-typed individuals. Thus, the use of sex role orientation to identify androgynous individuals for leadership roles is questionable.

Lastly, this study provided support for the effectiveness of training a 9,9 model of leadership (Blake & Mouton, 1964, 1978, 1980a, 1980b, 1982) which places emphasis on both production and people. It was effective in increasing task and socioemotional behaviors in both males and females who were highly sex-typed. However, the results indicate the training model is less effective with sex-typed females, suggesting that greater emphasis needs to be given to training Feminine females to use more of an Initiating

Structure style of leadership. Perhaps the use of a training program that is specifically geared to teaching females to use more task-oriented leadership behaviors, omitting the exposure to socioemotional leadership behaviors, may help increase the perceived differences in female task-oriented leadership.

Directions for Future Research

Several shortcomings were apparent in the research design. Foremost is the manipulation of contingency variables to help generalize the results, such as time spent together as a group, task structure versus ambiguity, sex composition of the groups, and performance cues. This study used only a short term group experience. The task was brief and may not have given adequate time to assess leadership differences. In addition, groups which work together over a longer period of time may favor a different leadership style than that used in a short-term group. This would be reflected in measures of group atmosphere and group functioning. Groups may also favor different leadership styles in highly structured tasks. Same-sex groups may have perceived the leadership styles differently than mixed-sex groups. Lastly, more knowledge needs to be obtained about how performance cues affect leader and group evaluations.

Leader variables were another area that were highly restricted in this study. Variations in age, experience, and ethnic background would help determine the utility of the leadership training for different populations.

In addition, the design for the current study did not include training of Androgynous individuals since it was predicted that untrained Androgynous leaders would demonstrate the requisite leadership styles without training. However, the lack of support for that hypothesis indicates the need to include Androgynous subjects for training to help determine if training would be as effective across all sex role orientations, and would compensate for the lower ratings obtained by Androgynous leaders on task-oriented and socioemotional measures.

Future research using a training program to increase cross-sex leadership behaviors should consider a more segregated training format. In this study Feminine females were not pereived to increase their task-oriented leadership style. It may be that they reflected their learning in the group processing rather than in their leadership style. A training program for females which focuses exclusively on increasing task-oriented leadership behaviors may better clarify this issue.

Future research should include several variations in the instruments used to measure leadership style and effectiveness, especially to evaluate leadership training effects. More objective measures of task productivity and quality of performance would help determine how much leader evaluations are affected by sex role stereotyping and how accurate members are in assessing leader and group performance. More sensitive measures of socioemotional group processing need to be developed to help assess the socioemotional leader competencies. To continue to focus outcomes on task variables would ignore the concern for people and group relations deemed important in the ideal leadership model. Task measures reflect more masculine competencies; the socioemotional measures reflect more feminine competencies. To compare males and females based on only one set of competencies would give one sex an unfair advantage in the evaluation process. While measurement of socioemotional group functioning is highly recommended for those reasons, current measures are riddled with problems. They are susceptible to a leniency response bias (Schriesheim et al., 1974) and are differentially rated by leaders and members (Graham & Gleno, 1970; Rice et al., 1980).

A further recommendation is made to use alternative methods of analysis to determine individual leader effects on groups members. The current study employed Analyses of Variance based on the subordinate perceptions of their sex role oriented leaders, collapsed across groups. A preferable analysis would be to analyze subordinate perceptions within groups in a hierarchical fashion, treating groups as a repeated measure. In addition, Multivariate Analyses of Variance of subscales within the major measures is a suggested means of determining within group response patterns.

A recommendation is also made to assess the effectiveness of leadership training. This study used the most commonly employed measurement of leadership style, an adaptation of the LBDQ XII (Stogdill, 1963). However, the congruency of the 9,9 leadership style and the subscales on the LBDQ XII has yet to be determined. A more direct assessment of the effectiveness of training the 9,9 leadership style might be to include the characteristics of the 9,9 leadership style on a leadership evaluation. For example, the 9,9 style is described by such characteristics as "commands respect" and gets right down to brass tacks at the beginning and stays on track". Using a leadership questionnaire consisting of these characteristics would help to provide consistency between leadership training preassessment measures and outcome measures, allowing for interpretations of changes in leadership style due to training.

APPENDIX A
CONSENT FORM

UNIVERSITY OF FLORIDA

DEPARTMENT OF PSYCHOLOGY CONSENT FORM

Subject's name ________________________________
Subject's class ________________________________
Project Number 83-78 Date ____________
Project Title Group Exercise
Principal Investigators: Kathrin Sirianni-Brantley
Dorothy D. Nevill

I agree to participate in the research as explained to me below:

As part of the course I am enrolled in, I will participate in a class exercise. The exercise is part of a lecture presentation on systematic desensitization and behavioral treatment of fears. I will be part of a group with five members, who will design a systematic desensitization hierarchy as specified in the instructions that will be given to my group leader. If selected to be a leader I will participate in a meeting before the class to get further directions on how to direct my group.

Pencil and paper measures will be given several weeks prior to the group task; others will be given following the exercise to obtain information regarding my perceptions of the group task and process. My responses will be anonymous by being assigned a number.

This class exercise is expected to benefit me in offering a practical application of the academic material being studied. My participation is voluntary, though attendance in class will be considered for one of the project grades in this class. I recognize there are other options for this project grade if I do not wish to participate in this study.

I understand there is no risk of physical harm. If I do not wish to participate I have other options worth an equal amount of credit. While in the group task I will not be pressured to perform in any way.

I have read and understand the procedure described above. I agree to participate in the procedure, and may ask any questions if the procedures for the study are not clear. I will receive a copy of this description.

The above stated nature and purpose of this research, including discomforts and risks involved (if any) have been explained to me verbally by ______________________________. Furthermore, it is agreed that the information gained from this investigation may be used for educational purposes which may include publication. I understand that I may withdraw my consent at any time without prejudice.

SUBJECT SIGNATURE ______________________________

I have fully defined and explained this research to the participant whose signature appears above.

INVESTIGATOR SIGNATURE __________________________

APPENDIX B
GENERAL LEADERSHIP PREPARATION TALK

You have been selected to be a leader for the upcoming class exercise. This was based on the results of the pretests you completed earlier in the semester. These pretests indicated you have potential to act as a successful leader.

Before the class exercise I wanted to meet with you to give you some indications of what you will be expected to do as the leader of a group for the scheduled exercise.

I will read off your name, and then assign four other students to your group. You will be spread out in several classrooms. However, the groups will still be seated close enough to create confusion. As a leader you will need to concentrate on your group, and keep your four members concentrated on your assigned task.

I will give you an instruction packet that will include (1) information about the subject area you will need to know to complete the assigned task. A brief lecture will be given about this material before you are divided into groups, and the information packet you receive will contain this lecture material. This should help you channel the group efforts, especially if they question about the lecture material. (2) An example of the task you will be performing is included to serve as a guide, though your group is expected to develop an original version of the task. (3) The goals of your group, along with a sheet to complete as you perform the task, will be included to give you some guidance in directing your group's activities.

I will review this material with you on ___________ (date of the task). I cannot give you the topic or the task today, but that Information Packet will assist you greatly.

Your group members will look to you for guidance since they will not have all this information. You are expected to keep them concentrated on your group, assign them tasks if that is necessary to complete the goals, get them to put forth their best efforts, and make sure you create a good working group. You are ultimately responsible for the cooperation of your group and its success with the task. Accomplish as much as you can in the time allotted, insuring your group members are participating, and the quality of your group's performance is high. We have limited time to complete the task, so you may not finish it entirely. In a later class period we will discuss everyone's results. Good luck.

APPENDIX C
LEADERSHIP TRAINING OF SOCIOEMOTIONAL AND INSTRUMENTAL BEHAVIORS

Today we are going to do leadership training. In one week you will be assigned a task that will need to be completed during the class period. Your leadership will be critical in getting the most done during that allocated time with the greatest amount of group satisfaction and task completion.

Each of you were selected to serve as leaders based on your leadership potential. This was measured on the tests you took earlier in the semester. The task today and next week will be to draw that potential out to the greatest degree.

Leadership styles vary from person to person. However, studies done in laboratory settings and in natural work environments have indicated there is a leadership style that has been shown to be the most effective in the areas of productivity and group member satisfaction. Both of these elements, productivity and satisfaction, are important in assessing the effectiveness of leaders and work groups. It is likely that you will do one of those better than the other. We want to focus today's training of the weaker of your abilities. It is hoped we will be able to develop your potential so that you will perform better in both productivity and member satisfaction.

First we will attempt to assess your strengths and weaknesses in your existing leadership style (see Appendix E).

Basically, leadership is both an art and a science. It requires dealing with people in a way to maximize their performance and contributions. It also requires accomplishing a task that would be successfully executed with a high quality result; not just completed, but performed in a way that is judged to be of high caliber. Thus, leadership entails attention given to both person and task contributions.

The most effective leadership style, the one that results in the highest productivity and greatest satisfaction, has a concern for getting the task accomplished as well as involving all group members in the process to get the task done. The concern for the participants in the work group exists to maximize their contributions, culminating in their feeling of greater satisfaction with their work, their group, the quality of the finished product, and the leader's performance.

There are five different leadership styles (See Appendix D). Let's take a look at the five styles, along with a brief description of each.

Based on these styles, the 9,9 leadership style has proven to be most effective. The task is accomplished in a competent manner that draws information from all participants. This leads to the most creative product, and the most satisfaction reported by coworkers. However, it does require a balanced position. You have to show as much concern for the contribution of each participant as you do for completing the task. The most important variable to achieve this is open communication. This has been found to lead to sound problem solving, good decisions, maximized human resources, and greatest task success.

Today's training will focus on six behaviors; three are geared to increase the participation in your group, three are geared to more efficiently complete the task. They are (1) solicit ideas; (2) listen; (3) check for differences of opinion, and settle conflicts; (4) explain the task, periodically reviewing the group's progress by summarizing; (5) voice your own opinions, not just be a secretary; (6) organize the incoming ideas.

APPENDIX D
DESCRIPTIONS OF INITIATING STRUCTURE AND CONSIDERATION

Styles of Leadership

1,1 (low initiating structure, low consideration behaviors)

SUMMARY

I accept the decisions of others with indifference.
I avoid taking sides by not revealing opinions, attitudes, and ideas.
When conflict arises, I try to remain neutral.
By remaining uninvolved I rarely get stirred up.
My humor is seen as rather pointless.
I put out enough to get by.

CHARACTERISTICS

Appears indifferent.
Seems passive and follows more than leads a conversation.
Does not show much interest in people.
Volunteers little or no information. When asked a question he or she answers and then closes up again.
Doesn't seem to have feelings.
Seems to show that just about any answer others accept is OK.
Seems to get discouraged easily and to almost prefer to leave than continue effort.

1,9 (low initiating structure, high consideration behaviors)

SUMMARY

I support decisions which promote good relations.
I embrace opinions, attitudes, and ideas of others rather than to push my own.
I avoid generating conflict but when it does appear, I try to keep people together.
Because of the disapproval tensions can produce, I react in a warm and friendly way.

My humor shifts attention away from the serious side.
I prefer to support others rather than initiate action.

CHARACTERISTICS
Conveys a sweet and warm attitude, smiling frequently, and agreeing wherever possible.
Acts as though he or she wants to be liked.
Says things others want to hear.
Seems to dread mentioning anything that might be interpreted as negative.
Fears being rejected.
Wants to please.
Seems almost too polite.

9,1 (high initiating structure, low consideration behaviors)

SUMMARY
I expect decisions I make to be treated as final.
I stand up for my ideas, opinions, and attitudes, even though it sometimes results in stepping on toes.
When conflict arises, I try to cut it off or win my position.
When things are not going right, I defend, resist, and come back with counter-arguments.
My humor is hard-hitting.
I drive myself and others.

CHARACTERISTICS
Comes on too strong and overwhelms others.
Seems to resent others asking questions.
Seems to feel free to fire questions at others any time, though this interrupts the flow of conversation.
Seems to like his or her aggressive behavior.
Doesn't seem to be concerned about feelings of others.
Raises objections to whatever others say.
Controls the conversation; others are expected to fit in.

5,5 (medium initiating structure, medium consideration behaviors)

SUMMARY
I search for workable, even though not perfect, decisions.
When others hold ideas, opinions, or attitudes dif-

ferent from my own, I try to meet them halfway.
When conflict arises I try to find fair solutions.
Under tension I feel unsure and anxious about how to meet others' expectations.
My humor sells me.

CHARACTERISTICS

Wants to impress others.
Seems tentative rather than giving flat answers.
Doesn't push.
Seems to be worried about giving a wrong answer and so appears cautious.
Explains himself or herself in stereotypical terms.
Seems to feel he or she can make an impression by being entertaining.

9,9 (high initiating structure, high consideration behaviors)

SUMMARY

I place high value on sound, creative decisions that result in understanding and agreement.
I listen for and seek out ideas, opinions, and attitudes different from my own.
I have strong convictions but respond to sounder ideas than my own by changing my mind.
When conflict arises, I try to identify reasons for it and seek to resolve underlying causes.
When aroused, I contain myself even though my impatience is visible.
My humor fits the situation and gives perspective; I retain a sense of humor even under pressure.
I exert vigorous effort and others join in.

CHARACTERISTICS

Commands respect.
Seems to enjoy give-and-take.
Gets right down to brass tacks at the beginning and stays on track.
Gives enough personal detail about himself or herself to help get the who am I talking to.
Listens keenly. Facts and logic seem to register.
Requests for clarification whenever a statement appears to be vague or unclear.
Poses comments and questions, but they do not distract.
Is open and friendly. There is no need for withholding or defensiveness.
Has an authentic quality.

APPENDIX E
LEADERSHIP TRAINING PRE-ASSESSMENT

Determining Your Leadership Style

You may find it valuable to assess communications in your own leadership behavior. Rank the paragraphs that follow from most to least typical as a description of your behavior; 5 as most typical, 4 is next most typical, and so on to 1, which is least typical. When you finish ranking the paragraphs, there should be only one of each number from 5 to 1. There can be no ties. Before starting, a word of caution: self-deception is likely to occur when you pick your answers. The deception is caused by the tendency of people to confuse the way they want to act as leaders with the way they actually act as leaders.

The first step in accurate self-assessment is to strip away self-deception in order to see your underlying assumptions. Some self-deception is probably unavoidable although it can be reduced by selecting answers based on your actual performance as a leader. This is a starting point for improving your leadership effectiveness.

____ A. I accept the decisions of others with indifference. I avoid taking sides by not revealing opinions, attitudes, and ideas. When conflict arises, I try to remain neutral. By remaining uninvolved I rarely get stirred up. My humor is seen as rather pointless. I put out enough to get by.

____ B. I support decisions which promote good relations. I embrace opinions, attitudes, and ideas of others rather than to push my own. I avoid generating conflict; but, when it does appear, I try to sooth feelings to keep people together. Because of the disapproval tensions can produce, I react in a warm and friendly way. My humor shifts attention away from the serious side. I prefer to support others rather than initiate action.

____ C. I search for workable, even though not perfect, decisions. When others hold ideas, opinions, or attitudes different from my own, I try to meet them halfway. When conflict arises, I try to find fair solutions that accomodate others. Under tension I feel unsure and anxious about how to meet others' expectations. My humor sells me or my position. I seek to maintain a steady pace.

____ D. I expect decisions I make to be treated as final. I stand for my ideas, opinions, and attitudes, even though it sometimes results in stepping on toes. When conflict arises, I try to cut it off or win my position. When things are not going right, I defend, resist, and come back with counter-arguments. My humor is hard-hitting. I drive myself and others.

____ E. I place high value on sound, creative decisions that result in understanding and agreement. I listen for and seek ideas, opinions, and attitudes different from my own. I have strong convictions but respond to sounder ideas than my own by changing my mind. When conflict arises, I try to identify reasons for it and seed to resolve underlying causes. When aroused, I contain myself even though my impatience is visible. My humor fits the situation and gives perspective; I retain a sense of humor even under pressure. I exert vigorous effort and others join in.

WHEN YOU HAVE COMPLETED THE ABOVE, PART II APPEARS ON THE NEXT PAGE.

APPENDIX F
LEADERSHIP TRAINING PRE-ASSESSMENT (PART B)

Choosing the elements that fit you best.

Consider all of the 1 element statements (i.e., A1, B1, C1, D1, and E1) and circle the one which best describes your behavior. Follow the same procedure for 2, 3, 4, 5, and 6.

ELEMENT 1: Decisions

A1. I accept the decisions of others with indifference.
B1. I support decisions which promote good relations.
C1. I search for workable, even though not perfect, decisions.
D1. I expect decisions I make to be treated as final.
E1. I place high value on sound creative decisions that result in understanding and agreement.

ELEMENT 2: Convictions

A2. I avoid taking sides by not revealing opinions, attitudes, and ideas.
B2. I embrace opinions, attitudes, and ideas of others rather than to push my own.
C2. When others hold ideas, opinions, or attitudes different from my own, I try to meet them halfway.
D2. I stand up for my ideas, opinions, and attitudes, even though it sometimes results in stepping on toes.
E2. I listen for and seek out ideas, opinions, and attitudes different from my own. I have strong convictions, but respond to ideas sounder than my own by changing my mind.

ELEMENT 3: Conflict

A3. When conflict arises, I try to remain neutral.
B3. I avoid generating conflict; but, when it does appear, I try to soothe feelings to keep people together.
C3. When conflict arises, I try to find fair solutions that accomodate others.
D3. When conflict arises, I try to cut it off or win my position.
E3. When conflict arises, I try to identify reasons for

it and seek to resolve underlying causes.

ELEMENT 4: Temper
A4. By remaining uninvolved I rarely get stirred up.
B4. Because of the disapproval tensions can produce, I react in a warm and friendly way.
C4. Under tension I feel unsure and anxious about how to meet others' expectations.
D4. When things are not going right, I defend, resist, and come back with counter-arguments.
E4. When aroused, I contain myself even though my impatience is visible.

ELEMENT 5· Humor
A5. My humor is seen as rather pointless.
B5. My humor shifts attention away from the serious side.
C5. My humor sells me or my position.
D5. My humor is hard-hitting.
E5. My humor fits the situation and gives perspective; I retain a sense of humor even under pressure.

ELEMENT 6: Effort
A6. I put out enough to get by.
B6. I prefer to support others rather than inititate action.
C6. I seek to maintain a steady pace.
D6. I drive myself and others.
E6. I exert vigorous effort and others join in.

APPENDIX G
SOCIOEMOTIONAL AND TASK TRAINING PACKAGE: SIX UNITS

UNIT I: SOLICIT IDEAS

OBJECTIVE: Don't let all the weight be on your shoulders or that of one of the other members. Be sure to ask for each person's opinion. This increases each person's participation and satisfaction with the group and your leadership.

BEHAVIORAL GOALS AND EXAMPLES:

1) Stress OPINIONS, not answers (not how should we do this? but what ideas do you have for this problem?)
2) Use OPEN-ENDED QUESTIONS (not you want to do this? but what do you want to do?) Use What? How? Tell me more about... or Explain that further.

PRACTICE TASK: Male leader
As a group, decide which are the ten larges cities in U.S. and rank them. Put the group member's name beside the cities they suggest, and have every group mwember sign the finished product, saying they endorse the ranking that the group assigned.

FEEDBACK FORM: Completed by the leader and their group members. After being turned in, group members give feedback to their leader regarding his ability to solicit opinions and use open-ended questions.

UNIT II: LISTEN

OBJECTIVE: Show you are listening to each person. People do this by giving eye contact to the person talking, nodding, summarizing what you just heard, questioning a point, and staying as neutral as possible about their opinions until you have heard what they had to say completely.

BEHAVIORAL GOALS AND EXAMPLES:

1) Summarize, staying neutral. (you said... or It sounds like... or What you mean is... or You're telling me...)

PRACTICE TASK: Male leader
Describe the proper etiquette for current dating on the first five dates (where to meet, door opening, who pays, what should you do, when should sexual aspects begin, etc.)

FEEDBACK FORM: Completed by the leader and their group members, followed by feedback to their leader regarding his ability to summarize and listen attentively.

UNIT III: CHECKING FOR DIFFERENCES OF OPINION

OBJECTIVE: Don't assume quiet members agree; find out what each person thinks, no matter how difficult or how long you must wait to get an answer. Ask for opinions of each person. When members disagree, summarize both sides of the conflict in an impartial manner. You need to resolve, rather than ignore differences for members to feel satisfied with their group participation. You can stay neutral and let the group members make a decision about how to negotiate a resolution. However, don't let it linger on so long that the task is neglected. Decide at those times to postpone the conflict if the members feel they can return to the task first.

BEHAVIORAL GOALS AND EXAMPLES:

1) Solicit opinions; use open-ended questions (Do you have other opinions about this? What are they? How do you propose we settle this difference?)
2) Summarize the different opinions being voiced; (Let's see, Barb thinks....., but Bill thinks....) Stay neutral in order to help the group arbitrate on a decision.
3) Summarize the result, even if it wasn't fully resolved. (We don't have an answer to that which is satisfactory for everyone, but we need to move along with the task.)

PRACTICE TASK: Female leader
Your group will be representing the student body to address the faculty of the business school which has said they have to cut back on admissions, and that they expect to admit fewer females because they are having trouble placing the ones who are graduating; the businesses want males because they seem to have better mathematical abilities. Outline the speech your group would present, and the arguments you would propose to defend your position.

FEEDBACK SHEET: After the leader and group members complete the feedback sheet, verbal feedback is presented to the leader regarding her ability to confront differences of opinions, poll everyone's feelings on the conflict, and assist the members toward a resolution using open-ended questionning and summarization.

UNIT IV: EXPLAINING THE TASK

OBJECTIVE: Allow for discussion about the task when you begin in order to insure that all members understand what they need to be doing (no excuses for sitting back!) and to keep the group centered on the task, with periodic reminders about the progress the group has made on the task.

BEHAVIORAL GOALS AND EXAMPLES:

1) Take charge of explaining the task in the beginning, questionning each person before proceeding (Do you understand what you will need to do for this task?)
2) Summarize halfway through the task to review the group's progress (So far we have... Bill and Barb have contributed, but I haven't heard your ideas yet, Steve We have decided on ....; is that what we really want?)

PRACTICE TASK: Female leader
Determine the five best and five worst cities, ranking the ten cities according to the following criteria: (1) ecoomics, (2) safety, (3) occupational opportunities, (4) environment, (5) educational facilities, (6) health hazards, (7) location, and (8) recreation.

FEEDBACK FORM: Each person completes the form, the provides the leader with feedback about her ability to clarify the task, keep the group informed on their progress with the task, and bring the group back on task if they happened to wander.

UNIT V: VOICING OPINIONS

OBJECTIVE: Don't be silent, nor always neutral about the issue. Your leadership will not be seen as strong if you just act as a silent monitor, or a secretary of the ongoing events. Contribute your ideas, keeping the conversation active.

BEHAVIORAL OBJECTIVES:

1) Contribute your ideas. Use I statements. (I think... I feel... I want... I once heard...)
2) Solicit feedback about your ideas. Don't assume that your ideas, once voiced, should be accepted by all members. (What do you think of that? Do you feel otherwise?) Don't appear uncertain, but don't railroad your ideas through.

PRACTICE TASK: female leader
Using the last task, determining the five best and worst cities, decide where your entire group is willing to relocate to live for the next two years, realizing you will have financial difficulties. The entire group must be willing to agree on the place, with each person giving their personal reason why they would like to live there.

FEEDBACK FORM: The forms are completed, followed by verbal feedback to the leader regarding her contributions to the task while she was leading the group discussion.

UNIT VI: ORGANIZING THE INCOMING IDEAS

OBJECTIVE: On of the most important skills is to keep all the input organized. Group members are responsible for contributing, or doing the things you assign them to do in particular. It is the leader's responsibility to keep the incoming ideas in a coherent fashion. The group should be periodically informed of this organization of the material they have contributed.

BEHAVIORAL OBJECTIVES:

1) Summarize the ideas, especially the decisions that the group made as a whole. (Everyone agreed on _______ so I'm putting that down as one of our major steps.)
2) Write things down, but maintain eye contact whenever possible.
3) Periodically inform the group what you have written down so far; this keeps them on task and helps to complete the task.
4) Be sure your organization is understood (This is what I have...does that clarify things for you?)
5) You choose how to organize the material.

PRACTICE TASK: Male leader
Develop ten realistic strategies for raising $10,000 in two months to support a special cause. Keep your current circumstances in mind, and only accept ideas that you as a group would really use. State the strategies, the time required to complete each one, the amount of money each should draw, and the method to solicit more help.

FEEDBACK FORM: After completing the last feedback form, the leader receives feedback on his ability to keep the input organized, the group informed, and to use a coherent system to organize the material.

APPENDIX H
LEADER TRAINING FEEDBACK SHEET

NAME____ DATE________

LEADER NAME______________________________ TASK________

Rate how frequently the leader demonstrated the following behaviors, using the 1 to 5 scale provided below:

1	2	3	4	5
NEVER	SOMETIMES	OFTEN	USUALLY	ALWAYS
0%	25%	50%	75%	100%
of the time	of the time	of the time	of the time	of the time

DO NOT LEAVE ANY BLANKS AND DO NOT USE HALF NUMBERS

1._____ Gave their impressions/reactions to the ideas expressed by group members.
2._____ Used I statements.
3._____ Used open-ended questions to draw out ideas, and opinions.
4._____ Summarized what members said.
5._____ Summarized and organized all the ideas being presented.
6._____ Showed appreciation for ideas expressed.
7._____ Got consensus, not 1 or 2 people doing all the decision-making.
8._____ Kept the conversation going.
9._____ Got quiet members to participate.
10._____ Kept track of all contributions.
11._____ Made sure ideas were understood.
12._____ Voiced their own opinion.
13._____ Explained what they were doing.
14._____ Considered many alternatives.
15._____ Bargained flexibly for decisions.
16._____ Avoided getting involved with differences in opinions.

APPENDIX I
LECTURE NOTES ON SYSTEMATIC DESENTIZATION

First I want to describe what systematic desensitization (SD) is. Imagine one of your greatest fears...now imagine what it would be like to face that object or situation remaining calm and unafraid. The purpose of SD is to allow someone to reduce the bodily reactions experienced when one is afraid (become less sensitive or desensitized) and thus not have to actively avoid the once feared stimuli. It is systematic in that it progresses step-by-step in a very organized manner, beginning with a less feared image and progressively approaching an image of the feared stimuli (the targeted fear).

The method of systematic desensitization was developed by Joseph Wolpe in the 1950's. His theory was that a person could not experience fear or anxiety and deep muscle relaxation at the same time. So he combined a method of relaxing with movement up a prearranged hierarchy of images. A client would be deeply relaxed then asked to imagine a scene that would be described in detail. The client would be continually asked to relax while imagining that scene for 30 seconds. However, if any anxiety is felt the client (who is usually comfortably seated with their eyes closed) would raise a finger to signal they are experiencing anxiety (heart beating fast, breathing becoming shallow, sweating, feeling restless, etc.). The client would then be further relaxed imagining a safe scene (e.g., a beach scene where the person in the image is relaxing in the sun, listening to the waves wash up on the shore...) until they can imagine the described step of the hierarchy without feeling the signs of anxiety for one minute continuously. Once they have met the one minute criteria, the next step in the hierarchy is attempted. Through this process the client will learn to control their level of arousal by associating being relaxed with the image of the once feared target. They can tolerate the image without discomfort or over-arousal usually experienced when confronted with the targeted fear.

The hierarchy is composed of images that relate to the targeted fear. They have something to do with the fear, but would arouse less anxiety in the client. The first image in the hierarchy would be likely to arouse some, but very little anxiety as compared to the targeted fear. If a hierarchy of ten steps is used, the first step would produce mild anxiety (1 on a scale of 1 to 10); the next step would produce slightly more anxiety (2 on a scale of 1 to 10); etc. To help illustrate how the steps become progressively more anxiety producing, an example is provided.

APPENDIX J
CASE EXAMPLE OF SYSTEMATIC DESENSITIZATION

Systematic desensitization begins with deep muscle relaxation (a brief illustration of this is given in class). After the client is put in a deep state of relaxation, he/she is asked to imagine a pleasant scene, which we are referring to as a safe scene. This scene will continually be associated with the state of relaxation, and will be used throughout the introduction of each step in the hierarchy.

An example of a safe scene: Imagine yourself resting on a beach on a warm, sunny day, letting the sun warm your body, not moving any part of your body. You can hear the waves rolling up on the shore, making a gentle sound to listen to.

Now picture a client who is extremely afraid of receiving injections.

The systematic desensitization hierarchy would develop like this:

STEP 1: Imagine you are reclining in a comfortable chair; the door is open and you can hear what is going on outside and see what is happening across the hall. You will be seeing a nurse today, in preparation for the visa application; you are planning to travel to a vacation resort in France. (This is presented for 30 seconds, interspersed with relaxation and reminders of the safe scene, until the client can imagine the scene for one minute continuously without signaling that they are experiencing any signs of anxiety.)

STEP 2: Imagine yourself still reclining in the chair, waiting for the nurse. You overhear them talking across the hall to a mother and child who will be receiving some injections today. They seem calm, and unaffected, as the mother talks reassuringly to the child.

STEP 3: You see the nurse approach the mother with a needle. The mother jokes with the nurse, and the child laughs.

STEP 4: You watch the mother receive an injection; she is very calm and thanks the nurse for doing such a good job.

STEP 5: You watch the nurse approach the child with the needle. The child sits calmly and laughs when the nurse says something.

STEP 6: You watch the child receive an injection. The child stays calm and looks at the mother who is smiling and telling the child how good they were.

STEP 7: The nurse tells you that you will be seen next. They tell you to relax for a few minutes.

STEP 8: You see the nurse approach you to check you over first. The nurse is very friendly, and tries to make you feel at ease. She cleans a spot on your arm with astringent in preparation, talking to you the whole time in a very reassuring voice.

STEP 9: The nurse picks up the needle. She asks you to sit comfortably, and to relax your arm.

STEP 10: The nurse injects you with the needle, applying pressure to your arm first, then releasing the pressure as you feel a warm sensation in your arm.

The client never talks (speaking might interfere with their state of relaxation). They need only raise a finger when they experience a twinge of anxiety. If anxiety is felt, the image is dispelled and replaced with the safe scene and more relaxation reminders.

APPENDIX K
GROUP GOALS

Most hierarchies try to stay within a range of 10 steps. Too many steps require too long a period to reach the final image. Knowledge of the client's other fears is important so that you won't write them into the steps of your hierarchy. This would induce more anxiety at a step in the hierarchy than would be desired or expected if you were dealing with just one fear at a time. Thus you want to ISOLATE ONE TARGETED FEAR to deal with in this hierarchy.

YOUR TASK TODAY is to develop a hierarchy using the client described on the attached sheet. Below are the specified tasks your group needs to accomplish in the best way possible; divide it up or do it as an entire group, whichever you decide is best in the time you have been given.

1. DECIDE WHAT THE TARGET OF THE LAST STEP IN THE HIERARCHY IS GOING TO BE. Also decide what needs to be avoided; the minor fears (secondary and tertiery fears) experienced by the client are included on the Client and Goal Form.

2. DEVELOP A HIERARCHY OF 10 STEPS. If more steps are needed you can use up to five more, but no more than fifteen steps can be used. Remember they need to become progressively more anxiety producing step-by-step as you approach the final step.

3. DEVELOP A CALMING, SAFE SCENE to be used during the relaxation part of the desensitization. Make it as relaxing as the beach scene described in the example, but do NOT use the beach example.

4. RATE EACH STEP OF THE HIERARCHY according to how much anxiety you expect the client to experience at each step. No matter how many steps you decide to use, rate according to the following scale of 1 to 20:

1.............	5..........	10..........	15...........	20
Client feels very slight feelings of anxiety (hardly noticable)	Feels somewhat anxious (some bodily signs)	Feels moderate anxiety (heart beating faster, breathing is unsteady, body may become tense)	Feels anxious (obvious signs of anxiety, could be worse)	Highest arousal level client would feel

5. HAVE SOMEONE CHECK THROUGH YOUR HIERARCHY for each of the following:
   (1) Each step should relate to the one before and after it, building on the previous step, making it an image that is slightly more anxiety producing than the preceeding one.
   (2) Use positive, calming words in each step (i.e., in the example the mother was very calm when she received the injection).
   (3) Avoid using negative terms in the step (i.e., you will get an injection that will hurt very much...).
   (4) Don't lecture to your client (i.e., don't tell they shouldn't be afraid of the injection...).
   (5) Be realistic. Don't describe scenes that are removed from what the client will ever experience (you will survive the nuclear attack...).
   (6) Be specific. Describe images clearly so your client will be able to visualize such a scene without having to ask questions (you don't want them to talk during deep relaxation). Your steps can be more descriptive than those provided in the injection example.

APPENDIX L
CLIENT AND GOAL FORM

GROUP LEADER'S NAME______________________________
FOUR GROUP MEMBERS:______________________________
____
____
____

DATE______________ CLASS______________________________

DESCRIPTION OF CLIENT:

1 FEAR: This client is extremely fearful of intimacy, of having others emotionally dependent on them. (Secondary fears: They feel moderate anxiety when discussing a dead person they were close to or when they feel dependent upon somebody else. Tertiery fears: They experience mild anxiousness when around snakes, spiders, roaches, sharks, strangers, leaning off of tall buildings or lookout towers, and driving in the rain.)

CLIENT'S DESCRIPTION OF THEIR FEAR: This fear occurs when I get too intimate with someone. I'm afraid they are going to rely on me for more than I can provide them with, especially emotional support. If they needed too much of my time it would interfer with the rest of my life and all the other things I have to do. This happens with my family, my close friends, and with close relationships. It hasn't been too bad with roomates, but I usually have independent friends. When it does happen I get all uptight and angry, though I don't express that to those people. I pull away, act real distant, and don't react to the person very much. Then I get afraid I'm going to lose that person so I try to be more responsive. I'd rather just be good friends, but they always seem to be more serious and loving than me. I don't like it that intense. Or when they or my family rely on me to do things for them -- it makes me feel obligated and I don't enjoy doing it as much as they enjoy doing things for me. I'd rather they left me alone, didn't ask me to do anything and I wouldn't ask them to do anything for me. It's just I'd hate it if they died and I felt like I didn't do enough for them, or they thought I was selfish and unloving.

1. What is your group going to choose for the last step in the hierarchy?

2. What are you going to avoid talking about in the steps?

3. Describe the safe scene you want to use with this client:

RATINGS
(1-20) 10 STEP OF THE HIERARCHY:

______ 1.

______ 2.

______ 3.

______ 4.

______ 5.

______ 6.

______ 7.

______ 8.

______ 9.

______ 10.

USE THE BACK FOR ANY ADDITIONAL STEPS YOUR GROUP FELT IT HAD TO USE. REMEMBER TO RATE EACH STEP FROM 1 TO 20.

APPENDIX M
LEADERSHIP QUESTIONNAIRE

Directions: On this questionnaire you are asked to rate your assigned leader (even if you felt another member in the group demonstrated greater leadership in the task). In the space preceeding each statement, mark 1 to 5 using the scale provided below.
DO NOT USE HALF NUMBERS AND DO NOT LEAVE ANY BLANKS.

NEVER	SELDOM	OCCASIONALLY	OFTEN	ALWAYS
0%	25%	50% of the time	75%	100%

1...........2...........3...........4...........5

1.___Decided what will be done and the way it will be done.
2.___Kept track of the time passing, always concerned about getting the task done in the time alloted.
3.___Nodded his/her approval or smiled when one member contributed an idea.
4.___Let other persons take away his/her leadership.
5.___Singled out certain people to address their ideas to.
6.___Acted superior to the other group members.
7.___Found a way to get quiet members to contribute to the discussion.
8.___Refused to give in when group members disagreed with him/her.
9.___Interrupted, as if too pressed for time to listen completely.
10.___His/her central concern was to get the task completed.
11.___Was hesitant or reluctant to accept group members' ideas.
12.___Spoke in a firm manner, not to be questioned.
13.___Didn't stop to explain his/her actions.
14.___Kept the group working together in harmony.
15.___Was the one who organized the ideas being contributed, putting them together in a plan to complete the task.
16.___Was aggressive in getting their way.
17.___Used many of the group members' suggestions, more than their own ideas, to complete the task.
18.___Reminded a group member when they weren't contributing or doing their assigned job.
19.___Told individual group members particular things to do to get the task done.

20.___Was willing to change when group members disagreed with him/her.
21.___Helped group members settle their differences of opinion about parts of the task being done.
22.___Consulted the group before making a decision.
23.___Tried out his or her ideas in the group, openly voicing his/her own ideas to accomplish the stated task.
24.___Backed down when he/she ought to have stood firm.
25.___Overcame attempts made by other group members trying to take over the leadership.
26.___Treated all group members as his/her equals.
27.___Explained his/her actions.
28.___Personally organized the procedure to accomplish the task, though did not necessarily come up with the ideas to complete the task.
29.___Maintained an emotionally close knit group.
30.___Let someone else decide the procedure that was used to complete the task.
31.___Was the first one to start talking or sharing his/her ideas.
32.___Made most of the decisions in the group.
33.___Kept to him/herself, often seeming quiet and not very interactive with the group members.
34.___Wanted to hear everyone's ideas; asked for opinions and listened carefully to contributions.
35.___Was easily recognized as being the leader of the group.
36.___Talked more than anyone else.
37.___Made positive statements or compliments when someone contributed an idea.
38.___Kept conversation centered on the task to be done; got discussion back to the task if the group discussion wandered.
39.___Made sustained and direct eye contact with one or more members.
40.___Made the group members feel at ease when talking with him/her.
41.___Acted without consulting the group members first, making decisions about how to deal with the task just assuming everyone would agree.
42.___Was hesitant about taking initiative in the group.
43.___Tried to get to know the group members personally, asking them things about themselves aside from the task.
44.___Looked at every group member when presenting his/her ideas.
45.___Checked it out to make sure everyone agreed and understood what he/she was trying to say.
46.___Was the leader of the group in name only (was assigned the role but another group member acted more like a leader).

APPENDIX N
DESCRIPTION OF ITEMS ON THE EIGHT LQ SUBSCALES

Subscale	Source	Items	(Subtotal)	Total
IS	LBDQ	1, 12(R), 19, 23, 28	(5)	
SBDQ		7, 18(R)	(2)	7
RA	LBDQ	4(R), 24(R), 25, 30(R), 35, 42(R), 46(R)		7
I	LBDQ	14, 21, 29		3
C	LBDQ	13(R), 17, 20, 26, 27, 33(R), 34, 41(R), 43	(9)	
	SBDQ	3, 5(R), 6(R), 8(R), 11(R), 15, 22, 37, 40, 45	(10)	19
TP	*	2, 9, 10, 38		4
AL	*	16, 32		2
EC	*	39, 44		2
VB	*	31, 36		2
			TOTAL	46

* The items on these subscales were not from a previously established scale.

APPENDIX O
DESCRIPTION OF THE FOUR GPFS SUBSCALES

Subscale	Source	Items	Total
Task Processing	Group Process Scale	1,2,3,4	4
Group Productivity	*	10,11	2
Cohesiveness	Work Group Functioning Scale	5,6	2
Socioemotional Group Processes	Work Group Functioning Scale	7,8,9(R),12	4
		TOTAL	12

* These items were not drawn from any previously used questionnaire.

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I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

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